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U. S. DEPARTMENT OF THE INTERIOR  
PROTOTYPE OIL SHALE LEASING PROGRAM

OIL SHALE TRACT C-b  
DEVELOPMENT MONITORING REPORT #6  
(December 1980 through April 1981)

Submitted to:

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U. S. Geological Survey  
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By:

CATHEDRAL BLUFFS SHALE OIL COMPANY

TENNECO SHALE OIL COMPANY  
OCCIDENTAL OIL SHALE, INC., OPERATOR

July 15, 1981

# TABLE OF CONTENTS BY VOLUME NUMBER

## TABLE OF CONTENTS

### VOLUME NUMBER

#### INTRODUCTION

- 1.0 PRE-EXPLORATION ENVIRONMENTAL RECONNAISSANCE SURVEYS
- 2.0 ENVIRONMENTAL DEVELOPMENT MONITORING PROGRAMS

#### 2.1 Photography

- 2.1.1 Surface Photography
- 2.1.2 Aerial Photography

#### 2.2 Hydrology and Water Quality

- 2.2.1 Levels and Flows
- 2.2.2 Water Quality
- 2.2.3 Supplemental Water Data

#### 2.3 Air Quality and Meteorology

- 2.3.1 Ambient Air Quality
- 2.3.2 Trace Metals (Inactive)
- 2.3.3 Meteorology
- 2.3.4 Visibility
- 2.3.5 Atmospheric Diffusion Studies
- 2.3.6 Inversion Studies
- 2.3.7 Tethersonde Soundings (Inactive)
- 2.3.8 Air Quality Assurance
- 2.3.9 Data Reports
- 2.3.10 Data Corrections
- 2.3.11 Supplemental Data Report

#### 2.4 Noise

- 2.4.1 Environmental Noise

#### 2.5 Biology

- 2.5.1 Terrestrial Wildlife Studies
- 2.5.2 Aquatic Studies
- 2.5.3 Terrestrial Vegetation Studies
- 2.5.4 Threatened and Endangered Species
- 2.5.5 Revegetation
- 2.5.6 Soil Survey and Productivity Assessment (Inactive)
- 2.5.7 Dendrochronology and Dendroclimatology (Inactive)

#### 2.6 Archaeological Studies



## TABLE OF CONTENTS (Continued)

### VOLUME NUMBER

III

- 2.7 Industrial Health and Safety
  - 2.7.1 Accident Frequency Analysis
  - 2.7.2 Mine Gas Monitoring
- 3.0 OTHER STUDIES
  - 3.1 Fish and Wildlife Management Plan (Inactive)
  - 3.2 Microenvironmental Studies
  - 3.3 Scenic Values Study (Inactive)
  - 3.4 Traffic Load
  - 3.5 Geology
- 4.0 DATA AUTOMATION
  - 4.1 Automation Status
  - 4.2 Station Computer Code
  - 4.3 Station Coordinates
- 5.0 SPECIAL REPORTS
- 6.0 REPORT DISTRIBUTION LIST

## INTRODUCTION

Regular environmental reporting for Oil Shale Tract C-b in the current phase called Development Monitoring consists of the following reports:

<u>REPORT</u>	<u>SUBMITTAL DATE</u>
Six-Month Data Reports	January 15 July 15
Annual Report	April

Development Monitoring was initiated in April, 1978. Following is a list of semi-annual data reports which have been submitted to the Deputy Conservation Manager - Oil Shale.

<u>Report #</u>	<u>Date Submitted</u>	<u>Period of Data</u>
Development Monitoring Report #1	January 15, 1979	April 1978 - September 1978.
Development Monitoring #2 Time Series Plots	July 15, 1979 August 15, 1979	October 1978 - April 1979. October 1978 - April 1979.
Development Monitoring #3 Time Series Plots	January 15, 1980 February 1980	May 1979 - October 1979. May 1979 - October 1979.
Development Monitoring #4 Time Series Plots	July 15, 1980 August 1980	November 1979 - May 1980. November 1979 - May 1980.
Development Monitoring #5 Time Series Plots	January 15, 1981 March 31, 1981	June 1980 - November 1980 June 1980 - November 1980

This present report, Development Monitoring Report #6, contains data from December 1980 through April 1981. The time series plots will be presented as a supplemental report for this reporting period, expected to follow this report in approximately one month.

In order to maintain accuracy in the data base and reports, for errors that are found requiring corrections from previously reported data, the following actions have been taken:

- 1) Summary tables in this report and the C-b computerized data base reflect corrected data to the best of our knowledge.
- 2) Cross-reference tables to data corrections and data corrections from the preceeding data report appear in this report.
- 3) Cumulative correction cross-reference tables are included in this report and the data corrections will appear in the next data report.









## 2.3 Air Quality and Meteorology

The Air Quality Program is concerned with background measurements of atmospheric gaseous constituents and meteorological processes which affect transport and diffusion.

Figure 2.3-1 shows air quality network locations which include the following.

- One air quality trailer at Station AB20 that resumed operation in July, 1978.
  - One air quality trailer at Station AB23 that has been in continuous operation since September, 1974 (prior to the 2 year Baseline Program).
  - One sixty-meter meteorological tower located at Station AA23, also operational since September, 1974.
  - Weighing-bucket rain gauges at Stations AB20 and AB23.
  - Pibal launches were conducted twice per day, every other day, at Station AB24 between October, 1977 and November, 1978 as a cooperative program with the EPA.
  - An acoustic radar instrument located at Station AB20 has been continuously recording since October, 1977.
  - Mechanical weather stations at Stations AD42 and AD56 have been in operation since February, 1978.
  - Hi-vol particulate samplers at Stations AB20, AB23, AD42 and AD56 have been operational since February, 1978. Monitoring was discontinued at Station AD42 on January 24, 1979.
- (Not shown on Figure 2.3-1 is the visibility monitoring station which is shown on Figure 2.3.5-1).

Parameter measurements for these Stations are summarized in Table 2.3-1. Malfunction codes for air quality and meteorology are listed in Table 2.3-2.

Five monthly data reports (December, 1980 - April, 1981) contain all the above basic data for this reporting period and are contained in this document.

All monitoring stations are referenced by their four-digit computer station codes. A cross-reference of the computer code and station I.D. appear in Section 4.0 (Data Automation).





# LEGEND

- ▲ Weighing-Bucket Rain Gauge
- Air Quality Trailer
- 60-M. Meteorological Tower
- Weather Station
- ▼ Acoustic Radar
- ◆ Pibal Launch Site

## AIR QUALITY AND METEOROLOGICAL STATION LOCATIONS

Figure 2.3-1



TABLE 2.3-1  
AIR QUALITY AND METEOROLOGICAL MEASUREMENTS

<u>Station AA23</u>	<u>Sampling Frequency</u>	<u>Minimum Reporting Frequency</u>
Tower: (@ 10m, 30m, 60m)	20 sec	1 Hr Avg
Wind Speed	20 sec	1 Hr Avg
Wind Direction	20 sec	1 Hr Avg
Temperature (10m)	20 sec	1 Hr Avg
Hor. Wind Dir. 60m	20 sec	1 Hr Avg
Delta Temp 60-10m	20 sec	1 Hr Avg
<u>Station AB20</u>		
NO	10 sec	1 Hr Avg
NO <sub>x</sub>	10 sec	1 Hr Avg
NO <sub>2</sub>	NO <sub>x</sub> -NO	1 Hr Avg
O <sub>3</sub>	10 sec	1 Hr Avg
Wind Speed	10 sec	1 Hr Avg
Wind Direction	10 sec	1 Hr Avg
Temperature	10 sec	1 Hr Avg
Particulate	24 Hr every 3 Days	24 Hr Avg
Precipitation	Continuous	1 Hr Total
<u>Station AB23</u>		
Trailer: NO	20 sec	1 Hr Avg
NO <sub>x</sub>	20 sec	1 Hr Avg
NO <sub>2</sub>	NO <sub>x</sub> -NO	1 Hr Avg
O <sub>3</sub>	20 sec	1 Hr Avg
SO <sub>2</sub>	20 sec	1 Hr Avg
H <sub>2</sub> S	20 sec	1 Hr Avg
CO	20 sec	1 Hr Avg
Baro. Press.	20 sec	1 Hr Avg
Solar Radiation	20 sec	1 Hr Avg
Relative Humidity	20 sec	1 Hr Avg
Particulates	24 Hr every 3 Days	24 Hr Avg
Precipitation	Continuous	1 Hr Total
<u>Stations AD42, AD56</u>		
Wind Speed	Continuous	1 Hr
Wind Direction	Continuous	1 Hr
Temperature	Continuous	1 Hr
Particulate (AD56 only)	24 Hr every 3 Days	24 Hr Avg
<u>Acoustic Radar (Station AB20)</u>		
Inversion Height	Continuous	1 Hr Avg
Stability Class (50m)	Continuous	1 Hr Avg
Stability Class (200m)	Continuous	1 Hr Avg

AIR QUALITY AND METEOROLOGICAL  
MALFUNCTION COMPUTER CODES

Numerical	Letter	
<u>Entry Code</u>	<u>Code</u>	<u>Description</u>
8000	TR	Trace of Precipitation
9000	CA	Calibration (calibration, system check)
9100	MT	Maintenance (changing paper, tape, charcoal)
9200	FO	Flame Out (on the GC - THC, HC, CH <sub>4</sub> , CO)
9300	IM	Instrument Malfunction (instrument failures)
9400	PF	Power Failure (generator failure)
9450	WR	Weather Related Malfunction (instrument freezes, temperature readings below instrumental detection)
9500	RF	Recording System Failure (chart jams, runs out clock stop)
9550	NV	Not Visible (values were not within range of instrument i.e. inversion heights may exist beyond the full scale of the Acoustic Radar)
9600	LI	Local Interference (car nearby)
9650	OE	Operator Error (Field tech leaves switch in wrong position)
9700	OS	Off Scale
9750	IN	Interference (CO <sub>2</sub> interference on sulfur data, SO interference in oxidant readings)
9800	SE	Special Experiment
9850	OR	Out for Repair (instrument removed from site with no replacement)
9870	TS	Temporary Monitoring Shutdown due to Operations Conflict
9900	VA	Variable Wind Direction
9950	CM	Calm (no wind direction when wind speed = 0)
9980	UN	Unlimited Ceiling (reported by NWS Stations)
9999		Blank (causes a space to be printed as in the beginning of a new month before a component starts)

7/31/80



TABLE OF CONTENTS  
AIR QUALITY AND METEOROLOGY

	<u>PAGE NO.</u>
2.3.1 Ambient Air Quality	II-7
2.3.1.1 Gaseous Constituents	II-9
2.3.1.2 Particulates	II-29
2.3.2 Trace Metals	II-33
2.3.3 Meteorology	II-35
2.3.4.1 Climatological Records	II-37
2.3.4.2 Precipitation Data	II-55
2.3.4.3 Wind Fields	II-79
2.3.4 Visibility	II-105
2.3.5 Atmospheric Diffusion Studies	II-107
2.3.6 Inversion Studies	II-109
2.3.7 Tethersonde Soundings	II-111
2.3.8 Air Quality Assurance	II-113
2.3.9 Data Reports	II-115
December	II-117
January	II-203
February	II-289
March	II-375
April	II-461
2.3.10 Data Corrections	II-547
2.3.11 Supplemental Data Report	II-575

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### 2.3.1 Ambient Air Quality

The monitoring program for air quality was carried out in accordance with the provisions of the Development Monitoring Plan, as modified by conditions of approval issued by the Oil Shale Office (OSO). During this reporting period two ambient air stations (AB20, AB23) monitored gaseous constituents.



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### 2.3.1.1 Gaseous Constituents

This section presents summary tables for air quality data from Stations AB20 and AB23.

<u>Table/Figure No.</u>	<u>Description</u>	<u>Page No.</u>
Table 2.3.1.1-1	Quarterly summary for Station AB20. December, 1980 - February, 1981	II-11
Table 2.3.1.1-2	Quarterly summary for Station AB23. December, 1980 - February, 1981	II-12
Table 2.3.1.1-3	Monthly arithmetic ambient air constituent concentrations of gases and particulates Station AB20	II-13
Table 2.3.1.1-4	Station AB23	II-14
Table 2.3.1.1-5	<u>Maximum Concentrations</u> 1-Hour Maximum Concentrations of H <sub>2</sub> S, Station AB23	II-15
Table 2.3.1.1-6	1-Hour, 3-Hour, and 24-Hour Maximum Concentrations of SO <sub>2</sub> , Station AB20	II-16
Table 2.3.1.1-7	1 Hour, 3-Hour, and 24-Hour Maximum Concentrations of SO <sub>2</sub> , Station AB23	II-17
Table 2.3.1.1-8	1-Hour and 8-Hour Maximum Concentrations of CO, Station AB20	II-18
Table 2.3.1.1-9	1-Hour and 8-Hour Maximum Concentrations of CO, Station AB23	II-19
Table 2.3.1.1-10	1-Hour Maximum Concentrations of O <sub>3</sub> , Station AB20	II-20
Table 2.3.1.1-11	1-Hour Maximum Concentrations of O <sub>3</sub> , Station AB23	II-21
Table 2.3.1.1-12	1-Hour Maximum Concentrations of NOX Station AB20	II-22
Table 2.3.1.1-13	1-Hour Maximum Concentrations of NOX, Station AB23	II-23

### 2.3.1.1 Gaseous Constituents (continued)

<u>Table/Figure No.</u>	<u>Description</u>	<u>Page No.</u>
Table 2.3.1.1-14	1-Hour Maximum Concentrations of NO, Station AB20	II-24
Table 2.3.1.1-15	1-Hour Maximum Concentrations of NO, Station AB23	II-25
Table 2.3.1.1-16	1-Hour Maximum Concentrations of NO <sub>2</sub> , Station AB20	II-26
Table 2.3.1.1-17	1-Hour Maximum Concentrations of NO <sub>2</sub> , Station AB23	II-27

Table 2.3.1.1-1

QUARTERLY SUMMARY (DECEMBER 1980 - FEBRUARY 1981)  
( $\mu\text{g}/\text{m}^3$ )  
STATION AB20

Parameter	Average	Maximum 24-Hour Value	Maximum 24-Hour Time	Maximum 8-Hour Value	Maximum 8-Hour Time	Maximum 3-Hour Value	Maximum 3-Hour Time	Maximum 1-Hour Value	Maximum 1-Hour Time
SO <sub>2</sub>	3.0	8.2	2/18/81			14.0	12/19/80	16.0	(1)
Particulate	6.0	23.4	1/5/81					127.5	2/18/81 1200-1300
O <sub>3</sub>	42.0							21.0	12/19/81 0800-0900
NO <sub>x</sub>	3.0							7.0	(1)
NO	1.0							13.0	1/5/81 1700
NO <sub>2</sub>	1.0							0.0	(2)
CO	0.0			0.0	(2)				

(1) Maximum concentration occurred 3 times. 12/19/80 @ 0800, 0900. 1/15/81 @ 1400.

(2) Never Exceeded Detection Limit.



Table 2.3.1.1-2

QUARTERLY SUMMARY (DECEMBER 1980 - FEBRUARY 1981)  
( $\mu\text{g}/\text{m}^3$ )

STATION AB23

PARAMETER	AVERAGE	MAXIMUM 24-HOUR VALUE	TIME	MAXIMUM 8-HOUR VALUE	TIME	MAXIMUM 3-HOUR VALUE	TIME	MAXIMUM 1-HOUR VALUE	TIME
H <sub>2</sub> S	0.0							17.0	12/5/80 1400
SO <sub>2</sub>	3.0	11.9	12/24/80 1400			13.1	12/25/80 (1)	13.1	(3)
PARTICULATE	7.6	58.4	12/3/80 0100						
O <sub>3</sub>	42.0							113.8	(2)
NO <sub>x</sub>	3.0							51.0	12/9/80 0400
NO	1.0							20.0	1/1/81 1200
NO <sub>2</sub>	2.0							45.0	12/9/80 0400
CO	0.0			300.0	12.8/80 1600			300.0	12/17/80 1900-2200

- (1) Maximum concentration occurred 4 times: 12/25/80 @ 0100, 0400, 0700, 1000.  
 (2) Maximum concentration occurred 3 times: 1/24/81 @ 1400; 2/5/81 @ 1300; 2/28/81 @ 1200  
 (3) Maximum concentration occurred 16 times: 12/25/80 @ 0100 - 1300; 12/26/80 @ 0100, 0200, 0600.

Table 2.3.1.1-3

(1980)

CONSTITUENT	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
NO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	0.25
NO <sub>2</sub>	0.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0	2.0	2.0	3.0	0.83
O <sub>3</sub>	36.0	32.0	45.0	64.0	66.0	67.0	58.0	56.0	57.0	49.0	37.0	25.0	49.3
CO	200.0	100.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	41.6
PARTICULATES	6.2	3.4	3.4	7.0	3.8	13.4	11.3	13.1	13.4	5.8	10.9	8.7	8.4
SO <sub>2</sub>	2.0	14.0	9.0	0.0	1.0	0.0	3.0	0.0	0.0	0.0	1.0	5.0	2.92

(1981)

CONSTITUENT	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEPT.	OCT.	NOV.	DEC.	AVERAGE
NO	1.0	1.0	2.0	0.0									
NO <sub>2</sub>	1.0	1.0	2.0	0.0									
O <sub>3</sub>	32.0	71.0	69.0	49.0									
CO	0.0	0.0	0.0	0.0									
Particulates	6.7	6.7	3.0	16.1									
SO <sub>2</sub>	1.0	1.0	2.0	0.0									

+ Geometric

(1) Monitoring of SO<sub>2</sub> at Station AB20 was initiated on 7/26/79



MONTHLY ARITHMETIC AMBIENT AIR CONSTITUENT CONCENTRATIONS  
OF GASES AND PARTICULATES (ug/m<sup>3</sup>)  
STATION AB23

Table 2.3.1.1-4

(1980)

CONSTITUENT	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
NO	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08
NO <sub>2</sub>	3.0	1.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	2.0	1.0	3.0	1.0
O <sub>3</sub>	61.0	72.0	79.0	87.0	80.0	78.0	76.0	76.0	80.0	78.0	70.0	66.0	75.25
CO	300	200	100.0	0.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	66.66
SO <sub>2</sub>	2.0	3.0	2.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0	0.0	2.0	1.0
H <sub>2</sub> S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	1.0	2.0	0.0	0.28
PARTICULATE	4.3	2.6	4.8	9.1	8.9	22.7	7.0	15.4	8.3	7.6	6.0	3.1	8.32 <sup>+</sup>

(1981)

CONSTITUENT	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEPT.	OCT.	NOV.	DEC.	AVERAGE
NO	1.0	1.0	2.0	(1)									
NO <sub>2</sub>	2.0	1.0	1.0	(1)									
O <sub>3</sub>	77.0	90.0	89.0	105.0									
CO	0.0	100.0	0.0	0.0									
SO <sub>2</sub>	2.0	2.0	0.0	0.0									
H <sub>2</sub> S	0.0	0.0	(1)	0.0									
Particulate	6.0	7.5	6.9	12.4									

+ Annual geometric mean in 1980 for Particulates was 8.32ug/m<sup>3</sup>

(1) IM for over 75% of month

Table 2.3.1.1-5

MAXIMUM CONCENTRATIONS OF H<sub>2</sub>S (ug/m<sup>3</sup>)

STATION AB23

By Month

(1979 - 1980)

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value (ug/m <sup>3</sup> )	9.0	1.0				8.0	3.0			3	1	19
Date	11/19/79	12/17/79				4/11/80				8/20/80	9/23/80	10-24-80
Time (MST)	1500-1600 (OR)	1600-1700	(1)	(1)	(1)	0900-1000		(1)	(1)	0800-0900	1100	3
Wind Direction (Deg)		224				3	260			56	4	193
Wind Speed (mps)		3				3	1			1	2	0

By Month

(1980 - 1981)

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value (ug/m <sup>3</sup> )	(1)	17			3	1						
Date		12/5/80			3/5/81	(4)						
Time (MST)		1400	(1)	(1)	1000							
Wind Direction (Deg)		180			177	158						
Wind Speed (mps)		3			3	2						

(OR) Out for repairs

{1} Peak never exceeded instrument lower detection limit.

{2} Maximum concentration occurred 2 times: 5/13/80 @ 1800, 1900

{3} Maximum concentration occurred 3 times: 10/24/80 @ 0700, 0800

{4} Maximum concentration occurred 9 times: 4/10/81 @ 0600, 4/21/81 @ 1300, 1400, 1500, 1600, 1700, 1800, 2100, 2200



Table 2.3.1:1-6

MAXIMUM CONCENTRATIONS OF SO<sub>2</sub> (ug/m<sup>3</sup>)\*

STATION AB20

(1979 - 1980)

By Month

Item	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
<b>1-Hour Maximum</b>												
Value (ug/m <sup>3</sup> )	16.0	8.0	18.0	21	13	5	8	8	13	5	13	3
Date	(2)	(4)	(7)	2/15/80	3/01/80	(11)	(13)	6/05/80	(15)	8/7/80	9/19/80	(18)
Time (MST)	(2)	(4)	(7)	1500	2400	(11)	(13)	1300-1400	(15)	(17)	0700-0800	(8)
Wind Direction (Deg.)	270	90	303	(VA)	137	137	104	201	275	178	102	286
Wind Speed (mps)	2	1	1	1	4	3	2	9	2	1	3	3
<b>3-Hour Maximum</b>												
Value (ug/m <sup>3</sup> )	13.1	7.9	18.3	18.3	5.2	5.2	7.9	4.4	11.3	5.2	9.6	2.6
Date	(3)	(5)	(8)	(9)	(10)	(12)	(14)	6/5/80	7/11/80	8/7/80	9/19/80	(18)
Time (MST)	(3)	(5)	(8)	(9)	(10)	(12)	(14)	1200-1300	(16)	1000	0600	(18)
Wind Direction (Deg.)	281	90	98	306	147	197	128	182	275	198	106	286
Wind Speed (mps)	2	1	0	2	3	3	2	9	3	4	4	2
<b>24-Hour Maximum</b>												
Value (ug/m <sup>3</sup> )	8.4	4.9	17.2	17.8	2.3	3.5	7.9	0.5	10.7	1.4	5.2	2.6
Date	11/24/79	(6)	1/30/80	2/02/80	3/23/80	4/01/80	5/12/80	6/14/80	7/11/80	8/6/80	9/04/80	10/30/80
Time (MST)	1700	(6)	0800	0100	1400	0100	1400	1500-1600	0900-1000	1500	2300	1100
Wind Direction (Deg.)	123	150	98	311	305	137	219	215	118	250	104	286
Wind Speed (mps)	3	1	0	0	3	3	2	9	1	4	1	3

(1980 - 1981)

By Month

Item	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
<b>1-Hour Maximum</b>												
Value (ug/m <sup>3</sup> )	5.2	16.0	16.0	10.0	8.0	(25)						
Date	(19)	12/19/80	1/15/81	(22)	(23)	(25)						
Time (MST)		0800-0900	1400	(22)								
Wind Direction (Deg.)	115	90	109	106	294							
Wind Speed (mps)	0	0	2	0	1							
<b>3-Hour Maximum</b>												
Value (ug/m <sup>3</sup> )	5.2	14.0	9.6	9.6	7.9	(25)						
Date	11/25/80	12/19/80	1/15/81	2/19/81	(24)	(25)						
Time (MST)	(20)	0800	1200	0300								
Wind Direction (Deg.)	117	90	111	130	321							
Wind Speed (mps)	1	0	1/1	2	2							
<b>24-Hour Maximum</b>												
Value (ug/m <sup>3</sup> )	5.2	7.0	6.2	8.2	6.8	(25)						
Date	(21)	12/19/80	1/14/81	2/18/81	3/9/81	(25)						
Time (MST)		0100	1500	0600	1500							
Wind Direction (Deg.)	117	115	191	CM	262							
Wind Speed (mps)	1	2	2	CM	1							

- (1) Not operational  
 (2) Maximum concentration occurred 3 times: 11/09/79 @1300; 11/11/79 @1200; 11/12/79 @1200.  
 (3) Maximum concentration occurred 2 times: 11/09/79 @1200; 11/27/79 @0700.  
 (4) Maximum concentration occurred 16 times: 12/02/79 @1900, 2000, 2100, 2200; 12/05/79 @0100; 12/11/79 @0700; 12/14/79 @1300; 12/15/79 @0600, 0900, 1300; 12/16/79 @0800, 0900, 1000, 2100; 12/17/79 @0200; 12/19/79 @2000.  
 (5) Maximum concentration occurred 2 times: 12/02/79 @1900; 12/16/79 @0800.  
 (6) Maximum concentration occurred 2 times: 12/02/79 @1200; 12/16/79 @0500.  
 (7) Maximum concentration occurred 22 times: 1/29/80 @1100; 1/30/80 @0800, 0900, 1000, 1400, 1500, 1600, 1800, 1900, 2000, 2100, 2200, 2300, 2400; 1/31/80 @0100, 0700, 0800, 1200, 1300, 2200, 2300, 2400.  
 (8) Maximum concentration occurred 5 times: 1/30/80 @0800, 1400, 1700, 2000, 2300.  
 (9) Maximum concentration occurred 5 times: 2/01/80 @1100, 1400, 1700; 2/02/80 @0600, 0900.  
 (10) Maximum concentration occurred 4 times: 3/24/80 @1100; 3/31/80 @1500, 1800, 2100.  
 (11) Maximum concentration occurred 16 times: 4/01/80 @0100-1600.  
 (12) Maximum concentration occurred 5 times: 4/01/80 @0100, 0400, 0700, 1000, 1300.  
 (13) Maximum concentration occurred 76 times: 5/01/80 @2000, 2300, 2400; 5/02/80 @0100, 0400-0700; 5/07/80 @1600-2400; 5/08/80 @0100-0900; 5/12/80 @1400-2400; 5/13/80 @0100-1700, 1900-2400; 5/14/80 @0100-0800, 1200-1400; 5/29/80 @1400, 2000, 2100; 5/30/80 @0600.  
 (14) Maximum concentration occurred 5 times: 5/01/80 @2300; 5/02/80 @0400; 5/07/80 @1600, 1900, 2000.  
 (15) Maximum concentration occurred 2 times: 7/11/80 @1800; 7/12/80 @0200.  
 (16) Maximum concentration occurred 2 times: 7/11/80 @1600, 2400.  
 (17) Maximum concentration occurred 6 times: 8/07/80 @0500, 1000-1400.  
 (18) Maximum concentration occurred 24 times: 10/30/80 @1100-2400; 10/31/80 @0100-1000.  
 (19) Maximum concentration occurred 96 times: Refer to monthly diurnal table of SO<sub>2</sub> in November Data Report.  
 (20) Maximum concentration occurred 5 times: @1200, 1500, 1800, 2100, 2400.  
 (21) Maximum concentration occurred 2 times: 11/25/80 @1200; 11/26/80 @1200.  
 (22) Maximum concentration occurred 4 times: 2/18/81 @0100, 1700; 2/19/81 @0400, 0500.  
 (23) Maximum concentration occurred 4 times: 3/9/81 @1800, 1900, 2000, 2100, 2200, 2300, 2400; 3/10/81 @0100, 0600, 0700, 0800, 1000, 1100, 1200, 1300.  
 (24) Maximum concentration occurred 4 times: 1400; 3/20/81 @1600.  
 (25) Peak never went above instrument lower detection limit

CM = Calm  
 VA = Variable

Table 2.3.1.1-7

(1979 - 1980)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
1-Hour Maximum Value (µg/m <sup>3</sup> )	36	9	11	21	16			5.2	5		10.5	13.0
Date	11/29/79	12/26/79	1/31/80	2/15/80	3/15/80			6/25/80	(4)		(6)	10/13/80
Time (MST)	0300-0400	2300-0200	1200-1300	1500-1600	1300-1400	(1)	(1)	0100-0800	348	(1)	315	0900-1000
Wind Direction (Deg.)	OR	33	345	225	205			205	2		1	169
Wind Speed (mps)	OR	3	1	2	7			0				2
3-Hour Maximum Value (µg/m <sup>3</sup> )	12.0	8.8	7.4	8.4	13.1			5.2	5.2		10.5	12.2
Date	11/29/79	12/26/79	1/31/80	2/29/80	3/14/80			(3)	(5)		9/29/80	10/13/80
Time (MST)	0100-0400	2300-0200	1200-1500	2200-0100	2100-2400	(1)	(1)	(3)	(5)	(1)	2400	0900
Wind Direction (Deg.)	OR	282	345	32	180			205	348		315	169
Wind Speed (mps)	OR	2	1	2	3			0	2		0	2
24-Hour Maximum Value (µg/m <sup>3</sup> )	1.8	7.6	5.9	7.3	8.6			2.7	3.2		8.5	8.5
Date	11/29/79	12/26/79	1/30/80	2/29/80	3/01/80			6/24/80	7/2/80		9/29/80	10/13/80
Time (MST)	0300	1500	1100	0100	0200	(1)	(1)	0900-1000	1000	(1)	1100	0900
Wind Direction (Deg.)	OR	309	5	272	322			200	348		354	169
Wind Speed (mps)	OR	3	1	(CM)	2			6	2		3	2

(1980 - 1981)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
1-Hour Maximum Value (µg/m <sup>3</sup> )	(1)	13.1	5	3.0	3	3						
Date		12/15/80	(9)	(12)	(13)	4/6/81						
Time (MST)		(7)		(12)	(13)	1500						
Wind Direction (Deg.)		214	341	299	230	224						
Wind Speed (mps)		6	0	2	4	5						
3-Hour Maximum Value (µg/m <sup>3</sup> )	(1)	13.1	3.5	2.6	2.6							
Date		12/15/80	(10)	(12)	(13)	4/6/81						
Time (MST)		(8)		299	230	1300						
Wind Direction (Deg.)		214	VA	2	4	223						
Wind Speed (mps)		6	CM			7						
24-Hour Maximum Value (µg/m <sup>3</sup> )	(1)	11.9	2.7	2.6	2.6							
Date		12/24/80	(11)	(12)	(14)	4/5/81						
Time (MST)		1400			1600	1600						
Wind Direction (Deg.)		192	303	299	230	187						
Wind Speed (mps)		4	1	2	4	3						

(CM) Calm

OR Out for repairs

(1) Peak never went above instrument lower detection limit

(2) Maximum concentration occurred 3 times: 12/26/79 @2300, 2400; 12/27/79 @0100

(3) Maximum concentration occurred 2 times: 6/25/80 @0100, 0400

(4) Maximum concentration occurred 11 times: 7/02/80 @1000-1500; 7/19/80 @0500-0900, 7/14/80 @0900;

(5) Maximum concentration occurred 3 times: 7/02/80 @1000, 1300; 7/9/80 @0500

(6) Maximum concentration occurred 3 times: 9/29/80 @2400; 9/30/80 @0400, 0800;

(7) Maximum concentration occurred 15 times: 12/25/80 @ 0100 - 1300; 12/26/80 @ 0100, 0200, 0600;

(8) Maximum concentration occurred 4 times: 12/25/80 @ 0100, 0400, 0700, 1000;

(9) Maximum concentration occurred 2 times: 1/22/81 @ 1100; 1/26/81 @ 1400

(10) Maximum concentration occurred 2 times: 1/22/81 @ 0900; 1/26/81 @ 1200

(11) Maximum concentration occurred 2 times: 1/21/81 @ 1200; 1/25/81 @ 1500

(12) Maximum concentration occurred <5 times: Refer to monthly diurnal table of SO<sub>2</sub> in February Data Report

(13) Maximum concentration occurred 5 times: 3/5/81 @ 1200, 1500, 1800, 2100, 2400;

(14) Maximum concentrations occurred 2 times: 3/5/81 @ 1200; 3/6/81 @ 1200

Table 2.3.1.1-8

MAXIMUM CONCENTRATION OF CO ( $\mu\text{g}/\text{m}^3$ )

STATION AB20

(1979 - 1980)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
1-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	2900.0	1100.0	1700.0	1400.0	1400.0	300.0	300.00	800.0	700.0	300.0	300.0	1100.0
Date	11/27/79	(9)	1/07/80	(10)	(11)	4/14/80	(13)	6/15/80	7/28/80	(14)	(16)	10/1/80
Time (MST)	1700-1800	(9)	1400-1500	(10)	(11)	1700	(13)	1600-1900	1600-1800	(14)	(16)	1000-1600
Wind Direction (Deg.)	318	140	295	VA	160	214	186	300	274	280	275	298
Wind Speed (mps)	1	4	8	1	3	0	3	4	2	5	3	1
8-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	1200.0	1700.0	1300.0	800.0	700.0	100.0	300.0	800.0	600.0	200.0	300.0	1100.0
Date	11/27/79	12/04/79	1/07/80	2/12/80	3/17/80	(12)	3/30/80	6/15/80	7/28/80	(15)	9/12/80	10/1/80
Time (MST)	1100-1900	1500-2300	1200-2000	1200-2000	1200-2000	(12)	1200-1300	1300-1400	1400-1500	(15)	1200	0900
Wind Direction (Deg.)	135	123	289	149	205	116	194	296	300	204	286	136
Wind Speed (mps)	3	1	4	3	1	2	1	4	1	4	4	3

(1980-1981)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
1-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	1400.0	0.0	0.0	0.0	0.0	0.0						
Date	(17)											
Time (MST)	(17)											
Wind Direction (Deg.)	180											
Wind Speed (mps)	1											
8-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	500.0	0.0	0.0	0.0	0.0	0.0						
Date	11/12/80											
Time (MST)	1300											
Wind Direction (Deg.)	172											
Wind Speed (mps)	4											

(VA) Variable Wind Direction

(IN) Instrument Malfunction

(OR) Instrument is out for repair

(1) Maximum concentration occurred 23 times during November

(2) Maximum concentration occurred 4 times: 2/20/79 @1200; 1/300; 1400; 2/15/79 @0700

(3) Maximum concentration occurred 4 times: 3/07/79 @1800; 1900; 3/29/79 @0100, 0300

(4) Maximum concentration occurred 2 times: 5/14/79 @0800, 0900

(5) Maximum concentration occurred 2 times: 5/07/79 @0500; 5/16/79 @0200

(6) Maximum concentration occurred 2 times: 6/22/79 @0900; 6/23/79 @0600

(7) Maximum concentration occurred 3 times: 7/19/79 @0800; 0900; 7/29/79 @0900

(8) Maximum concentration occurred 2 times: 7/19/79 @0600; 12/28/79 @1700, 1800, 1900

(9) Maximum concentration occurred 5 times: 12/26/79 @0300; 12/12/79 @0700; 12/28/79 @1700, 1800, 1900

(10) Maximum concentration occurred 3 times: 3/17/80 @2100; 3/05/80 @1800, 1900

(11) Maximum concentration occurred 5 times: 4/21/80 @0600; 4/14/80 @1000; 4/18/80 @0600; 4/19/80 @0400; 4/30/80 @0600

(12) Maximum concentration occurred 5 times: 5/30/80 @1400; 7/30/80 @1500, 1200

(13) Maximum concentration occurred 5 times: 8/18/80 @1800; 8/30/80 @1600-1800

(15) Maximum concentration occurred 3 times: 8/19/80 @ 1200; 8/21/80 @ 1200; 8/23/80 @ 1200.

(16) Maximum concentration occurred 5 times: 9/12/80 @ 1500-1900.

(17) Maximum concentration occurred 3 times: 11/12/80 @ 1800-2000.



MAXIMUM CONCENTRATIONS OF CO ( $\mu\text{g}/\text{m}^3$ )

Table 2.3.1.1-9

STATION A823

(1979 - 1980)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
1-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	1300.0	2400.0	3800.0	2000.0	1600.0	300	200	500.0	400.0	200.0	0.0	1700
Date	11/29/79	12/04/79	1/03/80	2/12/80	3/17/80	4/24/80	5/07/80	6/26/80	7/18/80	8/6/80		(11)
Time (MST)	0900-1700	1200-2300	1600-1700	1800-1900	1800-1900	1600-2400	1700-2400	2300-2400	1300-1400	1100-1500	(10)	(11)
Wind Direction (Deg.)	(OR)	214	201	219	203	53	213	209	224	220		216
Wind Speed (mps)	(OR)	7	3	5	7	6	4	4	3	5		5
8-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	1100.0	1700.0	3000.0	1000.0	1600.0	300.0	100.0	400.0	300.0	200.0	0.0	1700
Date	11/29/79	12/04/79	1/10/80	2/12/80	3/17/80	4/24/80	5/07/80	6/26/80	7/17/80	8/6/80		(12)
Time (MST)	0900-1700	1500-2300	0800-1600	1300-2100	2100-0500	1600-2400	1700-2400	1700-1800	1300-1400	1100-1500	(9)	(12)
Wind Direction (Deg.)	(OR)	216	225	223	151	40	112	229	208	205		216
Wind Speed (mps)	(OR)	5	12	6	3	4	1	8	PF	6		5

(1980 - 1981)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
1-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	200.0	300.0	300.0	100.0	200.0	200.0	200.0					
Date	11/14/80	12/17/80	1/14/81	2/12/81	3/2/81	4/2/81	5/17/81					
Time (MST)	1500	1900-2200	1600/1700	1400	185	17	11					
Wind Direction (Deg.)	(1)	209	225	299	185	309	309					
Wind Speed (mps)	1	1	3	2	4	4	4					
8-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	100.0	300.0	200.0	100.0	200.0	100.0	100.0					
Date	11/13/80	12/17/80	1/14/81	2/12/81	3/2/81	4/2/81	5/17/81					
Time (MST)	1300	1600	1200	1500	159	18	18					
Wind Direction (Deg.)	218	217	(MT)	299	5	15	15					
Wind Speed (mps)	6	4	(MT)	2	5	1	1					

\* On September 12, 1978, the gas chromatograph at Station A823 was replaced with a new N.D.I.R. monitor (VA) Variable Wind Direction (CM) Calm (OR) Out For Repair (MT) Maintenance

(1) No Data - Instrument Malfunction

(2) Maximum Concentration Occurred 2 times: 5/17/79 @1200

(3) Maximum Concentration Occurred 3 times: 8/02/79 @0700; 8/09/79 @0700

(4) Maximum Concentration Occurred 3 times: 11/26/79 @1500, 1600; 11/29/79 @1100

(5) Maximum Concentration Occurred 5 times: 3/5/80 @1600, 3/17/80 @2100, 2200, 2300, 2400

(6) Maximum Concentration Occurred 3 times: 4/24/80 @1700, 1800, 1900

(7) Maximum Concentration Occurred 2 times: 5/01/80 @1600, 1700

(8) Maximum Concentration Occurred 5 times: 5/1/80 @1100; 5/14/80 @0700, 1500; 5/23/80 @1300; 5/23/80 @1900

(9) Maximum Concentration Occurred 3 times: 8/6/80 @0900; 8/7/80 @1200; 8/8/80 @0900

(10) Values never reached lower detection limit of instrument.

(11) Maximum Concentration Occurred 16 times: 10/13/80 @1700-2400; 10/14/80 @1000-0800

(12) Maximum Concentration Occurred 2 times: 10/13/80 @1700; 10/14/80 @0100

(13) Maximum Concentration Occurred 4 times: 11/10/80 @1200, 11/11/80 @0000, 11/12/80 @1000, 11/13/80 @0700

(14) Maximum concentration occurred 295 times: Refer to monthly diurnal table of CO in February Data Report.

(15) Maximum Concentration occurred 37 times: Refer to monthly diurnal table of CO in February Data Report.

(16) Maximum Concentration occurred 5 times: 3/2/81 @ 1400, 1500, 1700; 3/13/81 @ 1300, 1400

(17) Maximum concentration occurred 4 times: 4/29/81 @ 1300, 1900; 4/30/81 @ 1700, 1800

(18) Maximum concentration occurred 2 times: 4/29/81 @ 1400, 4/30/81 @ 1100

Table 2.3.1.1-10

MAXIMUM CONCENTRATIONS OF OZONE ( $\mu\text{g}/\text{m}^3$ )

STATION AB20

(1979 - 1980)

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	66.7	49.0	49.0	49.0	113.8	121.6	115.8	120	114	110	112	102
Date	11/04/79	12/06/79	(1)	2/13/80	(2)	4/01/80	(3)	(4)	7/24/80	8/7/80	9/5/80	10/7/80
Time (MST)	1600-1700	1700-1800	(1)	1700-1800	(2)	1400-1500	(3)	(4)	1200-1300	1400-1500	(5)	1600
Wind Direction (Deg.)	257	(VA)	310	230	307	140	8	194	299	219	292	318
Wind Speed (mps)	4	0	4	2	1	1	0	4	1	3	1	3

(1980 - 1981)

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	96	82	100	127.5	121.6	78.0						
Date	11/17/80	(6)	1/15/81	(7)	3/12/81	(8)						
Time (MST)	1600	(6)	1600	(7)	1600							
Wind Direction (Deg.)	251	222	119	336	86							
Wind Speed (mps)	0	2	0	1	1							

(VA) Variable wind direction

(IM) Instrument malfunction

(1) Maximum concentration occurred 5 times: 1/06/80 @ 1100, 1300, 1400; 1/10/80 @ 2000, 2100

(2) Maximum concentration occurred 2 times: 3/31/80 @ 1600, 1700

(3) Maximum concentration occurred 2 times: 4/29/80 @ 1200, 1400, 1500, 1700

(4) Maximum concentration occurred 3 times: 6/02/80 @ 1500; 6/03/80 @ 1700, 1800

(5) Maximum concentration occurred 3 times: 9/05/80 @ 1200, 1400, 1500

(6) Maximum concentration occurred 2 times: 12/30/80 @ 1300, 1400

(7) Maximum concentration occurred 2 times: 2/18/81 @ 1200, 1300

(8) Maximum concentration occurred 3 times: 4/5/81 @ 1200; 4/6/81 @ 1800; 4/9/81 @ 1300

Table 2.3.1.1-11

MAXIMUM CONCENTRATIONS OF OZONE ( $\mu\text{g}/\text{m}^3$ )

STATION AB23

( 1979 - 1980 By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum												
Value ( $\mu\text{g}/\text{m}^3$ )	102.0	97.1	153.6	96.9	107.9	119.7	129.5	129	123	127	127	120
Date	(1)	12/10/79	1/03/80	2/13/80	(2)	(3)	5/24/80	6/3/80	7/18/80	8/4/80	9/29/80	10/8/80
Time (MST)	(1)	1700-1800	0700-0800	1700-1800	(2)	(3)	2100-2200	2400-0100	1800-1900	1700-1800	(4)	1400
Wind Direction (Deg.)	311	295	129	223	315	247	203	192	228	310	339	334
Wind Speed (mps)	1	1	2	2	1	1	5	3	6	7	3	3

(1980 - 1981 By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum												
Value ( $\mu\text{g}/\text{m}^3$ )	108	96	114	113.8	149	139						
Date	(5)	12/21/80	1/24/81	(6)	3/27/81	4/17/81						
Time (MST)	(5)	1900	1400	(6)	0800	1700						
Wind Direction (Deg.)	220	210	228	19	172	236						
Wind Speed (mps)	6	5	8	1	6	3						

- (1) Maximum concentration occurred 2 times: 1/30/80 @ 1500, 1600  
 (2) Maximum concentration occurred 2 times: 3/19/80 @ 1300, 1400  
 (3) Maximum concentration occurred 3 times: 4/01/80 @ 1800; 4/05/80 @ 1300; 4/25/80 @ 1400  
 (4) Maximum concentration occurred 2 times: 9/29/80 @ 1400, 1500  
 (5) Maximum concentration occurred 2 times: 11/9/80 @ 1600; 11/10/80 @ 1600  
 (6) Maximum concentration occurred 2 times: 2/05/81 @ 1300; 2/28/81 @ 1200



Table 2.3.1.1-12

MAXIMUM CONCENTRATIONS OF NOX ( $\mu\text{g}/\text{m}^3$ )

STATION AB20

(1979 - 1980) By Month

Item	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept.	Oct
1-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	19	15	11	17	36	23	24	6	13	8	15	17
Date	11/02/79	12/12/79		2/04/80	3/06/80	4/23/80	5/25/80		7/1/80	8/19/80	9/15/80	10/30/80
Time (MST)	1800-1900	1800-1900	(1)	0800-0900	1800-1900	0800-0900	2300-2400	(2)	2400-0000	0700-0800	0600	0800
Wind Direction (Deg.)	82	100	43	37	260	100	111	0	45	106	135	93
Wind Speed (mps)	1	1	1	0	0	1	2	0	0	2	3	1

(1980 - 1981) By Month

Item	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept.	Oct
1-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	21	21	15	9	13	2						
Date	11/5/80	12/19/80	(4)	(5)	3/21/81	(6)						
Time (MST)	0800	(3)	(4)		1600							
Wind Direction (Deg.)	90	90	VA	135	28	110						
Wind Speed (mps)	0	0	CM	0	1	1						

- (1) Maximum concentration occurred 3 times: 1/02/80 @ 1800; 1/07/80 @ 1000  
 (2) Maximum concentration occurred 3 times: 6/03/80 @ 0700; 6/08/80 @ 2400; 6/16/80 @ 0700  
 (3) Maximum concentration occurred 2 times: 12/19/80 @ 0800, 0900  
 (4) Maximum concentration occurred 2 times: 1/05/81 @ 1700; 1/15/81 @ 1400  
 (5) Maximum concentration occurred 3 times: 2/15/81 @ 1000; 2/18/81 @ 0800; 2/27/81 @ 0800  
 (6) Maximum concentration occurred 3 times: 4/14/81 @ 0900; 4/28/81 @ 0700, 0800

Table 2.3.1.1-13

MAXIMUM CONCENTRATIONS OF NOX ( $\mu\text{g}/\text{m}^3$ )

STATION AB23

(1979 - 1980) By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	42	30	18	24	21	28	38	6	32	13	26	58
Date	11/21/79	12/13/79	(1)	2/11/80	4/31/80	4/27/80	5/19/80	(2)	7/31/80	8/11/80	9/29/80	10/7/80
Time (MST)	0800-0900	0700-0800	(1)	1000-1100	1000-1100	0700-0800	0700-0800	(2)	0300-0400	1000-1100	0600	1800
Wind Direction (Deg.)	(OR)	88	113	279	351	56	50	206	210	353	207	337
Wind Speed (mps)	(OR)	1	1	1	1	0	0	6	1	1	0	3

(1980 - 1981) By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	41	51	32	26	39	(3)						
Date	11/5/80	12/9/80	1/20/81	2/4/81	3/4/81							
Time (MST)	0500	0400	0100	1200	0700							
Wind Direction (Deg.)	132	261	60	337	330							
Wind Speed (mps)	0	0	1	1	4							

(OR) Out for repairs

(1) Maximum concentration occurred 2 times: 1/22/80 @ 2400; 1/31/80 @ 1600

(2) Maximum concentration occurred 8 times: 6/02/80 @ 0900, 1000; 6/15/80 @ 0800; 6/19/80 @ 1700, 2100, 2400; 6/27/80 @ 1000, 1100

(3) &lt;75% Data

Table 2.3.1.1-14

MAXIMUM CONCENTRATIONS OF NO<sub>x</sub> (ug/m<sup>3</sup>)

STATION AB20

( 1979 - 1980 ) By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value (ug/m <sup>3</sup> )	2	7	4	9	6	4		2	5	2	4	5
Date		12/14/79		2/23/80	3/06/80	5/23/80		6/16/80	7/11/80			
Time (MST)	(1)	1000-1100	(2)	1500-1600	1800-1900	0800-0900	(3)	0700-0800	1800-1900	(4)	(5)	(6)
Wind Direction (Deg.)		5	325	297	260	100		104	279	102	131	103
Wind Speed (mps)		0	1	1	0	1		0	2	1	0	2

( 1980-1981 ) By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value (ug/m <sup>3</sup> )	9	7	7	2	5	1						
Date	11/5/80	1/15/81	1/15/81	(8)	3/10/81	(9)						
Time (MST)	0800	(7)	1400		0800							
Wind Direction (Deg.)	90	90	109	135	CLM	95						
Wind Speed (mps)	0	0	2	0	0	1						

(1) Maximum concentration occurred 4 times: 11/21/79 @ 900, 1000, 1900; 11/01/80 @ 800

(2) Maximum concentration occurred 2 times: 1/07/80 @ 1000, 1100

(3) Peak never exceeded instrument lower detection limit of 5 ug/m<sup>3</sup>

(4) Maximum concentration occurred 3 times: 8/09/80 @ 2100, 2200; 8/26/80 @ 0700

(5) Maximum concentration occurred 4 times: 9/10/80 @ 0700, 9/11/80 @ 0700, 9/16/80 @ 0600, 0700

(6) Maximum concentration occurred 2 times: 10/20/80 @ 0800, 10/30/80 @ 0800

(7) Maximum concentration occurred 2 times: 12/19/80 @ 0800, 0900

(8) Maximum concentration occurred 31 times: Refer to Monthly Diurnal Table of NO<sub>x</sub> in February Data Report

(9) Maximum concentration occurred 2 times: 4/28/81 @ 0700, 0800



Table 2.3.1.1-15

MAXIMUM CONCENTRATIONS OF NO<sub>x</sub> (ug/m<sup>3</sup>)

STATION AB23

Item	By Month											
	(1979 - 1980)											
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value (ug/m <sup>3</sup> )	11	9	6	6	7	6	9	1	6	1	4	18
Date	11/28/79	12/01/79	1/31/80	2/11/80	3/31/80	4/27/80	5/19/80	(2)	(3)	(4)	9/25/80	10/24/80
Time (MST)	1100-1200	1500-1600	1100-1200	1000-1100	1000-1100	0700-0800	0700-0800	(2)	(3)	(4)	0800	0400
Wind Direction (Deg.)	(1)	327	116	279	351	56	50	206	340	326	264	279
Wind Speed (mps)	1	1	1	1	1	0	0	6	1	1	1	0

Item	By Month											
	(1980 - 1981)											
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value (ug/m <sup>3</sup> )	7	17	20	10	15	(5)						
Date	11/4/80	12/26/80	1/01/81	2/4/81	3/9/81							
Time (MST)	0800-0900	0900-1000	1200	1200	1100							
Wind Direction (Deg.)	225	120	345	337	301							
Wind Speed (mps)	1	1	1	1	1							

(VA) Variable wind direction  
(MT) Instrument down for maintenance

(1) Out for repairs

(2) Maximum concentration occurred 3 times: 6/02/80 @ 0900, 1000; 6/19/80 @ 1700

(3) Maximum concentration occurred 3 times: 7/01/80 @ 1000; 7/16/80 @ 0700, 1000

(4) Maximum concentration occurred 3 times: 8/19/80 @ 1900; 8/21/80 @ 0900, 1000

(5) &lt;75% Data

Table 2.3.1.1-16

MAXIMUM CONCENTRATIONS OF NO<sub>2</sub>( $\mu\text{g}/\text{m}^3$ )\*

STATION AB20

Item	By Month											
	( 1979-1980 )											
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum												
Value ( $\mu\text{g}/\text{m}^3$ )	19	15	11	17	26	17	24	6	8	6	15	11
Date	11/02/79	12/12/79	1/02/80	2/04/80	3/06/80	4/23/80	5/25/80	6/8/80	(1)	(2)	9/15/80	(3)
Time (MST)	1800-1900	1800-1900	1800-1900	0800-0900	1800-1900	0800-0900	2300-2400	2400	(1)	(2)	0600	(3)
Wind Direction (Deg.)	82	100	43	37	260	100	111	101	115	70	135	104
Wind Speed (mps)	1	1	1	0	0	1	2	2	1	0	3	0

Item	By Month											
	( 1980-1981 )											
	Nov	Dec.	Jan.	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum												
Value ( $\mu\text{g}/\text{m}^3$ )	11	11	13	6	9	2						
Date	(4)	(5)	1/05/81	(6)	(7)	4/14/81						
Time (MST)	(4)	(5)	1700		107	0900						
Wind Direction (deg.)	15	90	VA	121	1	110						
Wind Speed (mps)	1	1	CM	0		1						

CM = Calm

VA = Variable

- (1) Maximum concentration occurred 3 times: 7/1/80 @2300, 2400; 7/2/80 @0900;  
 (2) Maximum concentration occurred 5 times: 8/1/80 @2400; 8/9/80 @0100,0200; 8/19/80 @0700; 8/22/80 @2000;  
 (3) Maximum concentration occurred 2 times: 10/10/80 @0700; 10/11/80 @0700;  
 (4) Maximum concentration occurred 2 times: 11/3/80 @1900; 11/18/80 @1000;  
 (5) Maximum concentration occurred 8 times: 12/12/80 @ 1800, 1900; 12/15/80 @ 1800; 12/16/80 @ 1700; 12/18/80 @ 1800;  
 12/19/80 @ 1800, 1900; 12/23/80 @ 0800;  
 (6) Maximum concentration occurred 8 times: 2/15/81 @ 0100, 1000, 1100; 2/17/81 @ 1000, 1100; 2/18/81 @ 0800; 2/23/81 @ 1900, 2/27/81 @ 0800  
 (7) Maximum concentration occurred 2 times: 3/19/81 @ 0900; 3/21/81 @ 1600

Table 2.3.1.1-17

MAXIMUM CONCENTRATIONS OF NO<sub>2</sub> (ug/m<sup>3</sup>)  
STATION AB23

Item	By Month											
	(1979 - 1980)											
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value (ug/m <sup>3</sup> )	33	29	23	15	19	19	24	2	32	13	13	41
Date	11/21/79	12/13/79	1/22/80	2/11/80	3/19/80	4/27/80	5/19/80	(2)	7/31/80	8/11/80	9/25/80	9/7/80
Time (MST)	0800-0900	0700-0800	2400-0100	(1)	1900-2000	0700-0800	0700-0800	(2)	0300-0400	1000-1100	0700-0800	(3)
Wind Direction (Deg.)	(OR)	88	113	264	337	56	50	229	106	353	10	258
Wind Speed (mps)		1	1	1	4	0	0	3	1	1	0	0

Item	By Month											
	(1980 - 1981)											
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
1-Hour Maximum Value (ug/m <sup>3</sup> )	36	45	21	17	23	(4)						
Date	11/5/80	12/9/80	1/20/81	2/6/81	3/4/81							
Time (MST)	0500	0400	0100-0200	1800	0700							
Wind Direction (Deg.)	132	261	60	333	330							
Wind Speed (mps)	0	0	1	3	4							

(OR) Out for repairs

- (1) Maximum concentration occurred 3 times: 2/11/80 @ 0800, 0900, 1000  
 (2) Maximum concentration occurred 5 times: 6/15/80 @ 0800; 6/19/80 @ 2100, 2400; 6/27/80 @ 1000, 1100  
 (3) Maximum concentration occurred 2 times: 10/7/80 @ 0200, 1800  
 (4) <75% Data



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### 2.3.1.2 Particulates

This section presents summary tables of 24-hour maximum concentrations for suspended particulates at Stations AB20, AB23, and AD56. The monthly data samples are presented in each of the monthly data reports.

Following is a list of tables for this section:

		<u>Page No.</u>
Table 2.3.1.2-1	Maximum Concentrations of Particulates Station AB20	II-30
Table 2.3.1.2-2	Maximum Concentrations of Particulates Station AB23	II-31
Table 2.3.1.2-3	Maximum Concentration of Particulates Station AD56	II-32

MAXIMUM CONCENTRATIONS OF PARTICULATES ( $\mu\text{g}/\text{m}^3$ )

STATION AB20

Item	By Month											
	( 1979-1980 )											
	Nov	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
24-Hour Maximum Value (ug/m <sup>3</sup> )	12.2	11.6	15.9	10.3	7.0	21.3	21.4	33.0	20.5	30.9	22.7	40.5
Date	11/06/79	12/12/79	1/08/80	2/01/80	3/08/80	4/25/80	5/22/80	6/24/80	7/15/80	8/5/80	9/28/80	10/1/80

Item	By Month											
	(1980 - 1981)											
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
24-Hour Maximum Value (ug/m <sup>3</sup> )	18.2	9.2	23.4	15.1	5.9	50.9	22.8					
Date	11/21/80	12/3/80	1/5/81	2/25/81	3/18/81	4/24/81	5/9/81					

MAXIMUM CONCENTRATIONS OF PARTICULATES ( $\mu\text{g}/\text{m}^3$ )

### By Month

Item	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept.	Oct
24-Hour Maximum Value (ug/m <sup>3</sup> )	18.4	8.4	18.2	10.4	8.5	23.1	27.5	40.5	12.2	24.0	32.5	32.9
Date	11/06/79	12/18/79	1/08/80	2/07/80	3/08/80	4/16/80	5/22/80	6/27/80	7/18/80	8/08/80	9/16/80	10/10/80

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
24-Hour Maximum Value ( $\mu\text{g}/\text{m}^3$ )	25.7	58.4	13.6	16.7	15.3	21.0	29.3					
Date	11/3/80	12/3/80	1/20/81	2/16/81	3/27/81	4/18/81	5/15/81					











### 2.3.3 Trace Metals

No additional studies were conducted during this time period.

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### 2.3.3 Meteorology

During this reporting period meteorological parameters were monitored at four stations; AB20, AA23, AD42, AD56. Station AB20 instrumentation is monitored at 10 meter level. Station AA23 is a 60 meter meteorological tower, co-located by station AB23 (air quality trailer), with monitoring instrumentation at three levels; 10 meter, 30 meter, and 60 meter. Stations AD42 and AD56 are mechanical weather stations which monitor at 10 meter level. All of the above systems operate on a continuous basis.

Data for Stations AD42 and AD56 are not included for this reporting period (December, 1980 through May, 1981), due to lag in data reduction. These data will be reported in the next semi-annual data report.

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### 2.3.3.1 Climatological Records

This section presents low altitude meteorology for temperature, relative humidity, direct solar radiation and stability classes. The Colorado climatological data for temperature, snowfall and snow on ground are also presented here.

<u>Table/Figure No.</u>	<u>Description</u>	<u>Page No.</u>
	<u>Low Altitude Meteorology</u>	
	<u>Meteorology Summary</u>	
Table 2.3.3.1-1	Temperature at Station AB20	II-38
Table 2.3.3.1-2	Temperature and Relative Humidity, Station AA23	II-39
Table 2.3.3.1-3	Temperature at Station AD42	II-40
Table 2.3.3.1-4	Temperature at Station AD56	II-41
Table 2.3.3.1-5	Direct Solar Radiation, Station AB23	II-42
	<u>Colorado Climatological Data</u>	
Table 2.3.3.1-6	Minimum Temperature, Station WR01	II-43
Table 2.3.3.1-7	Maximum Temperature, Station WR01	II-45
Table 2.3.3.1-8	Minimum Temperature, Station WR02	II-47
Table 2.3.3.1-9	Maximum Temperature, Station WR02	II-49
Table 2.3.3.1-10	Snowfall, Station WR02	II-51
Table 2.3.3.1-11	Snow on Ground, Station WR02	II-53

Figure 2.2.1 shows monitoring stations presented in this section.

(10 Meter Height)

Table 2.3.3.1-1

(1979 - 1980)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Temperature, Hourly Maximum(°C)	13	11	9	13	12	23	26	32	33	32	30	26
Temperature, Hourly Minimum(°C)	-24	-26	-23	-22	-16	-9	-1	1	8	3	-3	-9
Temperature, Hourly Average(°C)	-4	-5	-3	-1	1	6	11	18	21	19	14	7

(1980-1981)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Temperature, Hourly Maximum(°C)	21	17	13	IM	13	24						
Temperature, Hourly Minimum(°C)	-14	-13	-14 /	IM	-3	-4						
Temperature, Hourly Average(°C)	1	-2	-2	IM	(1)	(1)						

METEOROLOGICAL SUMMARY: TEMPERATURE AND RELATIVE HUMIDITY

ST N AA23  
(10 Meter Height)

Table 2.3.3.1-2

(1979 - 1980)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Temperature, Hourly Maximum(°C)	13	9	6	10	9	20	23	31	31	30	27	23
Temperature, Hourly Minimum(°C)	-14	-17	-16	-17	-13	-9	-1	3	11	4	1	-8
Temperature, Hourly Average(°C)	(1)	-2	-4	-1	-1	5	9	19	21	19	15	7
Relative Humidity Hourly Maximum(%)	100	(1)	(1)	95	99	98	98	90	93	94	93	94
Relative Humidity Hourly Minimum(%)	21	(1)	(1)	18	22	13	11	11	8	8	8	7
Relative Humidity Hourly Average(%)	73	(1)	(1)	67	66	53	61	32	42	39	42	52

(1980-1981)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Temperature, Hourly Maximum(°C)	18	13	11	12	13	21						
Temperature, Hourly Minimum(°C)	-5	-11	-11	-19	-8	-9						
Temperature, Hourly Average(°C)	9	2	-1	-1	1	9						
Relative Humidity Hourly Maximum(%)	98	96	99	100	99	86						
Relative Humidity Hourly Minimum(%)	13	17	21	17	37	40						
Relative Humidity Hourly Average(%)	58	57	66	60	(1)	56						

(1) < 75% Data



(10 Meter Height)

Table 2.3.3.1-3

(1978 - 1979)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Temperature, Hourly Maximum (°C)	16	1	2	(1)	(1)	16	22	31	32	33	30	24
Temperature, Hourly Minimum (°C)	-17	-28	-32	(1)	(1)	-17	-9	-8	3	1	-7	-23
Temperature, Hourly Average (°C)	3	-9	-9	(1)	(1)	5	5	13	17	14	13	3

(1979 - 1980)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Temperature, Hourly Maximum (°C)	9	10	5	8	7	21	24	31	32	32		
Temperature, Hourly Minimum (°C)	-28	-24	-24	-27	-21	-15	-7	-4	7	-2		
Temperature, Hourly Average (°C)	-10	-8	(1)	-6	-5	1	6	15	(1)	(1)		

Table 2.3.3.1-4

METEOROLOGICAL SUMMARY: TEMPERATURE AT STATION AD56\*  
(10 Meter Height)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Temperature, Hourly Maximum (°C)	(RF)	(1)	(RF)	9	13	20	23	34	34	34	(1)	26
Temperature, Hourly Minimum (°C)	(RF)	(1)	(RF)	-15	-19	-15	-6	-6	2	3	(1)	-21
Temperature, Hourly Average (°C)	(RF)	(1)	(RF)	-3	2	7	7	14	17	18	(1)	4

(1978 - 1979)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Temperature Hourly Maximum (°C)	10	10	6	21	20	24	25	31	28	31	(2)	
Temperature Hourly Minimum (°C)	-28	-21	-19	-17	-9	-8	-6	-3	6	-1	(2)	
Temperature Hourly Average (°C)	-6	(1)	(1)	6	8	10	7	15	(1)	(1)	(2)	

(1979 - 1980)

\*Monitoring of temperature at Station AD56 was initiated February 1978  
(1) 50% or less data  
(2) Data not available for this report period.

Table 2.3.3.1-5

Direct Solar Radiation  
STATION AB23

MONTH/ YEAR	TOTAL LANG. FOR MONTH		AVG. DAY- LIGHT HRS/DAY	DAYLIGHT HRS PER MONTH	UPTIME DAYLIGHT HRS/MO.	CORR. FACTOR = 5 6	AVG. LANG/DAY (MOD.)	DAILY TOTAL/DATE	
	UNMOD.	MOD.*						HIGHEST	LOWEST
1	2	3 = 2 x 7	4	5	6	7	8/ (Days	9	10
1/78	1147	-	10	310	98	-	--	249/13	67/18
2/78	4508	8250	11	308	168	1.833	294.6	404/18	90/3
3/78	954	-	12	372	22	-	-	101/30	67/31
4/78	-	-	13	390	-	-	-	-	-
5/78	7587	-	14	434	183	-	-	714/12	5/21
6/78	-	-	15	450	-	-	-	-	-
7/78	1835	-	15	465	55	-	-	646/30	366/29
8/78	16327	16441	14	434	431	1.007	530.4	663/3	234/14
9/78	12107	12627	13	390	374	1.043	420.9	483/22	126/18
10/78	9957	9957	12	372	372	1.000	321.2	442/3	40/22
11/78	5480	5480	10	300	300	1.000	182.7	296/2	40/11
12/78	4635	4686	10	310	306	1.011	151.2	255/13	53/17
1/79	4454	4472	10	310	309	1.004	144.3	297/23	43/6
2/79	7718	7718	11	308	308	1.000	275.6	395/25	88/22
3/79	9749	11621	12	372		1.192	374.9	535/24	182/27
4/79	10990	15716	13	390	273	1.430	523.9	664/20	258/12
5/79	12498	15873	14	434	342	1.270	512.0	702/20	213/9
6/79	18374	18411	15	450	449	1.002	613.7	745/21	169/8
7/79	17557	17557	15	465	465	1.000	566.4	726/7	366/6
8/79	14743	14743	14	434	434	1.000	475.6	675/3	158/14
9/79	13519	13593	13	390	388	1.005	453.1	589/1	288/25
10/79	9769	9857	12	372	369	1.009	318.0	452/1	27/21
11/79	5756	6124	10	300	282	1.064	104.1	363/2	35/20
12/79	5680	5890	10	310	299	1.037	190.0	256/12	60/28
1/80	4851	5468	10	310	275	1.127	176.9	354/31	24/14
2/80	6583	6906	11	319	304	1.049	238.1	394/27	83/20
3/80	10275	10861	12	372	352	1.057	350.3	608/15	60/22
4/80	14256	14285	13	390	389	1.002	476.2	630/13	197/24
5/80	13984	15131	14	434	401	1.082	488.1	691/28	217/7
6/80	19591	19728	15	450	447	1.007	657.6	725/13	439/1
7/80	14706	16971	15	465	403	1.154	206.1	684/15	309/2
8/80	15417	15602	14	434	429	1.012	503.3	654/4	301/31
9/80	11689	11689	13	390	390	1.000	389.6	546/1	131/9
10/80	9629	9658	12	372	371	1.003	311.5	425/182	79/27
11/80	5066	5101	10	300	298	1.007	170.0	302/18	36/24
12/80	3638	3638	10	310	310	1.000	117.4	194/1	23/7
1/81	4332	4332	10	310	310	1.000	139.7	262/18	31/31
2/81	7169	7287	11	308	303	1.017	260.3	373/23	78/1
3/81	8885	8885	12	372	372	1.000	286.6	475/29	62/6
4/81	14054	14054	13	390	390	1.000	468.5	610/28	217/7

STATION: WRO1

MINIMUM TEMPERATURE (DEG. F)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	7	6			38		54	49	29	28	14	21
2	15	10	16		32		55	48	33	23	11	16
3	3	14	28		31		48	42	36	19	13	33
4	24	22	26		37		45	37	34	21	16	33
5	3	4	22		36		45	37	31	23	16	27
6	14	15	30		36		41	39	39	22	16	22
7	7	22	26		35		48	41	44	22	22	22
8	8	-9	18		39		49	43	46	23		16
9	14	-16	13				45	52	47	21		4
10	18	10	21					41	49	18	19	-2
11	-4	-8	21		38		53	34	36	18	18	0
12	18	-5	19		29		48	38	36	26	21	2
13	31	9	9		31		56	46	36	28	24	-1
14	32	24	19		25		46	50	32	33	16	0
15	26	32	22		29		38	52	29	27	4	-2
16	27	27	18		34		41	40	37	26	-1	-1
17	23	24	3		30		42	38	31	26	-3	9
18	24	31	10		26		48	34	29	29	-4	10
19	15	26	22		26		46	36	36	19	-2	12
20	12	31	19		36		41	29	36	17	3	8
21	8	30	10		34		40	31	26	18	1	11
22	6	25	11				42	31	22	18	4	18
23	5	22	20				42	39	17	11	8	24
24	6	15	22		34		43	50	22	6	17	12
25	11	5	24				42	46	19		-2	13
26	3	16	17				41	39	21	14	2	17
27	-4	17	7				45	36	25	24	-2	17
28	14	12	14				44	35	27	18		19
29	12	28	23		32		43	47	25	9	14	11
30	-9		19		28		49	34	24	12	14	8
31	-17		10		19		41	34		16		8
AVG.	11.4	14.4	18.0	--	32.0	--	45.4	40.3	31.8	20.5	9.6	12



STATION: WR01

MINIMUM TEMPERATURE (DegF)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	8	9										
2	10	-12										
3	13	-8										
4	14	-4										
5	15	-6										
6	9	-4										
7	2	-4										
8	1	2										
9	1	9										
10	5	-2										
11	0	-19										
12	-1	-5										
13	-3	8										
14	-2	9										
15	1	19										
16	4	18										
17	4	19										
18	6	16										
19	3	17										
20	5	17										
21	2	8										
22	1	5										
23	1	10										
24	6	14										
25	5	14										
26	-2	20										
27	4	17										
28	14	11										
29	18											
30	19											
31	9											
Avg.	5.5	6.4										

STATION: WR01

MAXIMUM TEMPERATURE (DEG. F)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	32	42	56		63			88	70	83	62	50
2	31	36	47		63			88	74	79	63	41
3	33	50	48		65			86	80	69	64	55
4	42	46			67			88	82	75	56	60
5	49	42	45		66			84	84	78	61	57
6	38	39	42		67			89	86	76	67	45
7	33	38	44		69			89	84	78	66	43
8	36	29	45		62			91	73	79		34
9	44	28	44				88	91	65	79		34
10	44	33	47		61		88	88	63	75		33
11	28	40	43		53		88	87	69	69	71	45
12	43	47	37		48		89	87	69	77	68	51
13	50	46	45		55		85	89	68	71	60	44
14	45	46	54		59		80	88	78	61	33	42
15	38	45	51		64		82	84	78	61	32	47
16	42	45	45		62		85	75	79	49	35	53
17	42	47	39		52		89	74	74	37	29	56
18	40	49	50		64		91	80	77	46	36	57
19	34	48	50		69		91	82	83	49	42	59
20	30	42	58		72		88	77	81	57	44	46
21	35	43	55		74		88	73	72	59	47	48
22	37	41	42		80		89	80	62	61	48	54
23	40	45	44		70		92	85	63	58	51	52
24	46	46	50		67		90	79	70	43	44	52
25	42	50	40		54		88	73	69		33	49
26	26	51	42		65		88	76	72	62	37	56
27	42	55	45		72		89	75	79	51	36	56
28	25	56	49		73		88	79	79	40		60
29	44	42	43		65		91	80	79	51	52	55
30	33		43		73		89	77	76	52	54	52
31	32		43		68		86	76		60		60
AVG.	37.9	43.7	45.9	--	64.7	--	87.9	82.5	74.6	62.8	49.7	49.

STATION: WR01

MAXIMUM TEMPERATURE (DegF)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	58	29										
2	54	28										
3	55	39										
4	52	44										
5	52	38										
6	34	43										
7	40	40										
8	46	41										
9	48	45										
10	51	44										
11	48	15										
12	46	36										
13	42	45										
14	44	52										
15	49	55										
16	47	52										
17	41	58										
18	48	55										
19	48	58										
20	46	60										
21	48	38										
22	50	38										
23	55	49										
24	59	61										
25	46	60										
26	38	60										
27	33	48										
28	46	49										
29	50											
30	44											
31	41											
	47.1	45.7										



COLORADO CLIMATOLOGICAL DATA

Table 2.3.3.1-8

STATION: WRO2

MINIMUM TEMPERATURE (DEG. F)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	9	3	15	12	38	33	57	49	36	36	25	28
2	15	15	16	22	33	31	55	53	38	31	26	16
3	8	23	32	17	34	36	52	48	45	31	27	
4	24	27	30	26	36	34	48	44	43	32	27	15
5	17	8	27	25	36	39	44	44	41	34	28	29
6	10	21	30	34	39	37	45	44	51	32	27	22
7	7	25	21	23	44	37	51	51	50	35	30	24
8	14	-3	22	15	41	37	53	48	51	35	46	21
9	27	-8	17	21	41	41	49	56	46	33	23	11
10	27	-3	19	34	40	43	54	49	52	28	30	8
11	1	2	19	22	39	44	56	42	29	29	25	14
12	20	6	23	17	33	43	56	44	48	33	34	15
13	38	21	5	15	32	40	57	50	39	40	29	10
14	32	27	19	20	32	36	46	50	38	33	22	11
15	29	34	28	27	33	38	44	53	39	25	9	17
16	26	28	20	25	38	38	47	44	48	29	10	19
17	26	28	3	24	32	42	49	41	36	30	5	23
18	25	31	11	27	31	45	49	43	38	31	9	25
19	19	31	24	31	36	46	47	44	41	26	11	22
20	14	32	17	33	40	44	47	37	37	27	15	18
21	7	30	24	38	41	44	48	38	33	27	12	22
22	6	31	31	43	42	46	50	41	27	30	20	35
23	4	29	27	37	40	45	54	53	26	17	23	28
24	13	3	26	38	36	42	52	52	38	15	27	19
25	19	4	26	27	28	43	48	47	29	19	16	19
26	10	14	20	25	27	46	46	45	34	23	9	26
27	5	19	13	28	29	53	47	41	34	30	9	24
28	16	19	19	32	34	39	48	52	37	16	20	27
29	15	29	22	40	45	46	49	52	37	16	22	18
30	1		20	37	35	60	52	42	37	20	11	18
31	-6		16		29		50	38		27		18
AVG.	15.4	18.1	20.7	27.2	35.9	41.6	50.0	46.3	39.3	28.1	20.9	20.1



Table 2.3.3.1-8 (Cont)

STATION: WR02

MINIMUM TEMPERATURE (DegF)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	16	16	23	12	39							
2	19	-8	22	11	42							
3	19	2	25	29	35							
4	23	5	29	19	25							
5	29	2	21	9	22							
6	13	12	25	17	30							
7	11	5	26	30	25							
8	9	13	24	29	30							
9	13	24	17	11	32							
10	15	3	21	19	28							
11	11	-9	21	17	23							
12	9	12	31	28	30							
13	7	13	23	40	29							
14	9	17	22	29	30							
15	19	18	22	34	43							
16	20	23	20	24	36							
17	20	26	24	35	36							
18	17	26	15	37	36							
19	14	26	22	22	39							
20	17	26	11	14	38							
21	11	9	26	27	28							
22	12	14	18	32	44							
23	13	20	27	28	44							
24	10	18	30	34	35							
25	12	19	52	35	39							
26	4	19	16	35	46							
27	18	30	17	36	48							
28	27	21	26	33	43							
29	27		20	35	46							
30	20		26	37	39							
31	16		6		50							
Avg.	15.5	14.4	22.84	26.60	35.81							

STATION: WR02

MAXIMUM TEMPERATURE (Deg. F)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	32	39	44	40	62	68	85	88	75	81	65	46
2	34	35	43	37	60	70	67	87	81	80	63	55
3	27	48	48	42	64	77	81	89	83	75	58	59
4	39	43	45	50	67	77	84	88	85	77	62	58
5	41	40	45	56	68	78	86	88	87	76	69	49
6	34	40	45	52	67	77	89	90	85	79	65	46
7	33	40	45	45	62	78	85	91	73	81	66	40
8	36	32	45	48	61	83	81	96	70	80	60	36
9	42	29	44	57	58	84	86	90	69	79	70	33
10	42	37	48	55	61	86	88	89	71	71	70	42
11	38	38	44	43	57	85	87	88	70	76	68	52
12	40	42	39	43	45	83	86	91	68	67	61	48
13	47	43	45	48	58	81	78	87	79	60	52	43
14	46	44	52	62	60	79	81	88	79	58	31	48
15	38	44	52	65	62	75	86	75	79	50	34	53
16	39	43	46	56	61	77	87	74	75	42	29	58
17	38	43	37	67	55	85	90	80	79	47	35	60
18	42	46	50	70	64	87	91	82	84	50	44	60
19	38	48	50	72	68	86	88	78	80	68	45	48
20	29	43	51	75	73	86	88	72	72	60	48	50
21	38	42	55	73	78	84	89	80	70	61	50	52
22	33	45	47	67	80	85	90	87	65	59	44	52
23	40	48	43	69	76	86	88	84	71	58	45	46
24	45	41	50	61	68	87	87	75	70	56	37	48
25	42	40	44	62	54	89	88	75	73	64	35	56
26	28	48	40	61	65	90	87	76	78	56	35	56
27	43	54	45	69	74	83	89	89	79	38	33	58
28	40	56	38	69	71	84	92	82	80	36	51	56
29	42	50	43	70	71	89	92	80	77	51	55	54
30	35		44	59	73	85	87	76	83	62	55	57
31	30		34		72		88	69		64		58
AVG.	37.8	42.8	45.2	58.1	65.0	82.1	86.2	83.4	76.3	63.3	51.2	50

Table 2.3.3.1-9 (Cont)

STATION: WR02

MAXIMUM TEMPERATURE (DegF)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	55	31	48	56	81							
2	55	35	51	62	79							
3	52	42	42	52	64							
4	50	37	46	35	62							
5	44	38	51	50	70							
6	38	40	47	60	69							
7	43	38	42	59	62							
8	45	41	43	52	53							
9	48	40	49	65	56							
10	48	34	52	69	66							
11	47	39	44	67	61							
12	47	44	49	65	58							
13	47	51	51	66	56							
14	48	55	52	70	73							
15	50	54	54	65	72							
16	45	53	56	65	67							
17	48	51	48	71	50							
18	47	53	45	74	65							
19	46	59	53	68	70							
20	49	52	50	61	69							
21	50	38	46	63	55							
22	55	46	51	55	58							
23	59	57	55	68	65							
24	46	59	51	75	70							
25	40	58	55	76	67							
26	33	58	63	75	68							
27	41	51	57	74	70							
28	47	54	41	71	71							
29	47		50	76	70							
30	38		44	76	77							
31	39		41		75							
Avg	46.7	46.7	49.26	64.7	66.1							



STATION: WR02

SNOWFALL (inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2	3.0			2.0								
3				.5								
4			.5									
5												
6			3.5									
7		1.0	2.0	1.0								1.5
8			4.0									
9	1.0		2.0									
10												
11												
12			7.0									
13											.3	
14												
15	T											
16	1.0		2.0							4.0		
17										6.0		
18		1.0								1.0		
19												
20		.3										
21												
22		1.3	2.0									
23		2.5										
24											.5	
25			4.0									
26	2.0		.5									
27												
28	10.0											
29	3.0	2.5										
30	1.0		1.0									
31			4.0									
MAX.	10.0	2.5	7.0	2.0						6.0	0.5	1.5



COLORADO CLIMATOLOGICAL DATA

Table 2.3.3.1-10 (Cont)

STATION: WR02

SNOWFALL

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		4.0										
2												
3			1.2	3								
4				1								
5	2.3											
6												
7			6									
8												
9												
10		5.0										
11												
12												
13												
14												
15												
16												
17			6.2									
18			1									
19												
20		1.5										
21			2.2									
22												
23												
24			3									
25	1.0											
26												
27			2									
28			2									
29	.2											
30	4.0		7									
31			2									
TOTAL	7.5	10.5	32.6	4								

STATION: WRO2

SNOW ON GROUND (inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	3	4										
2	6	4		2								
3	5	4										
4	5	3	1									
5	4	3										
6	4	3	2									
7	4	4	4									1
8	4	4	8									
9	3	4	2									
10	4	3	T									
11	3	3										
12	3	2	3									
13	2	2										
14		1										
15												
16	1		1							1		
17										2		
18		1								1		
19												
20		1										
21		T										
22		1										
23		3										
24		3									T	
25		2	3									
26	1	2										
27		1										
28	9											
29	5	2										
30	5		1									
31	5		4									
MAX.	9	4	8	2						✓	/	1

STATION: WR02

SNOW ON GROUND

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		4										
2		4										
3		3		2								
4		3		2								
5	2	2										
6		2										
7		1	2									
8			1									
9												
10		5										
11		4										
12		3										
13		1										
14												
15												
16												
17			5									
18			2.2									
19			1									
20		2										
21			2									
22												
23												
24			1.2									
25												
26												
27												
28			1									
29												
30	3		6									
31	2		3									
TOTAL	7	34	24.4	4								







### 2.3.3.2 Precipitation

This section includes precipitation data monitored at two Cathedral Bluffs stations and surrounding USGS monitoring stations. Tables 2.3.3.2-1 presents a summary of precipitation monitored at station AB20 and AB23. Diurnal tables of these two stations for December 1980 through May 1981 are presented in the following monthly data reports. USGS precipitation data are reported for the following stations:

<u>Station &amp; Designation</u>	<u>Computer Code</u>	<u>Page No.</u>
LH	WR01	II-56
M	WR02	II-58
SG	WR03	II-60
CG	WR04	II-62
JOS	WR05	II-64
EFPC	WR06	II-65
EMFPC	WR07	II-67
UCBW	WR08	II-69
09306015	WU15	II-71
09306022	WU22	II-73
09306050	WU50	II-75
09306058	WU58	II-77

Figure 2.2-1 shows monitoring stations presented in this section.

SUMMARY OF PRECIPITATION AT TWO STATIONS  
(Measured with, -ing rain gauge)

(1979-1980)

STATION	ITEM	MONTH											
		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
AB20	1-Hour Max. (Cm) Date Time (MST)	.89 11/20/79 1000	.15 12/10/79 2300	.36 1/29/80 0900	.51 2/18/80 1700	.25 3/06/80 1000	.36 { (2) 4/29/80 2100	.66 5/07/80 2000	.03 (4) 6/9/80 0100	.46 7/1/80 1900	.38 (6) 8/15/80 0500	.43 9/8/80 2300	.51 10/14/80 2100
AB23	1-Hour Max. (Cm) Date Time (MST)	1.07 11/22/79 1100	.18 12/11/79 1100	.33 1/29/80 0500	.46 2/19/80 1000	.30 { (1) 3/25/80 1600	.33 4/29/80 2100	.18 { (3) 5/11/80 1600	.05 6/9/80 0100	.41 7/23/80 1700	.28 8/15/80 0500	.38 9/10/80 1300	.46 10/14/80 1700
AB20	24-Hour Max. (Cm) Date	2.03 11/20/79	.33 12/27/79	1.45 1/28/80	.97 2/18/80	1.09 3/25/80	1.09 4/29/80	1.96 5/07/80	.03 (5) 6/9/80	1.37 7/2/80	.76 8/23/80	.51 9/8/80	1.93 10/14/80
AB23	24-Hour Max. (Cm) Date	1.17 11/22/79	.41 12/11/79	1.19 1/28/80	.63 2/23/80	.94 3/25/80	1.22 4/29/80	1.14 5/11/80	.05 6/9/80	.41 7/23/80	.56 8/15/80	.43 9/10/80	2.01 10/14/80
AB20	Total (CM)	6.65	1.07	4.27	3.61	5.82	1.98	5.92	.13	3.48	2.49	1.24	3.89
AB23	Total (CM)	5.33	1.14	2.84	3.53	5.74	2.24	2.26	.15	1.65	1.57	.94	2.97

(1980-1981)

STATION	ITEM	MONTH											
		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
AB20	1-Hour Max (Cm) Date Time (MST)	.25 (7) 11/23/80 0600	.23 12/23/80 0600	.10 1/5/81 0200	.08 (10) 2/10/81 1900	.33 3/30/81 1200	.38 4/3/81 0900						
AB23	1-Hour Max. (Cm) Date Time (MST)	.33 (8) 11/11/80	.15 (9) 12/07/80	.25 1/5/81 0500	.13 2/10/81 1900	.25 3/30/81 1600	.25 (11) 4/3/81						
AB20	24-Hour Max. (Cm) Date	.86 11/12/80	.36 11/23/80	.63 1/5/81	.20 2/10/81	1.07 3/30/81	1.02 4/3/81						
AB23	24-Hour Max. (CM) Date	1.09 11/11/80	.43 12/07/80	.84 1/5/81	.41 2/10/81	.97 3/30/81	1.14 4/3/81						
AB20	Total (CM)	1.47	.86	1.30	.46	4.01	1.40						
AB23	Total (CM)	1.73	.94	1.68	.86	3.20	1.52						

- (1) The 1-hour max. for March at Station AB23 occurred 2 times: 3/16/80 @0100; 3/26/80 @0700
- (2) The 1-hour max. for April at Station AB20 occurred 2 times: 4/29/80 @2100 and 2200
- (3) The 1-hour max. for May at Station AB23 occurred 2 times: 5/11/80 @1900; 5/12/80 @1800
- (4) The 1-hour max. for June at Station AB20 occurred 5 times: 6/16/80 @2200; 6/21/80 @1600; 6/22/80 @1500; 6/24/80 @0800; 6/25/80 @0800
- (5) The 24-hour max. for June at Station AB20 occurred 5 times: 6/16/80 @2200; 6/21/80 @1600; 6/22/80 @1500; 6/24/80 @0800; 6/25/80 @0800
- (6) The 1-hour max. for Aug. at Station AB20 occurred 2 times: 8/15/80 @0500; 8/23/80 @2200
- (7) The 1-hour max. for Nov. at Station AB20 occurred 2 times: 11/12/80 @2200 & 2400
- (8) The 1-hour max. for Nov. at Station AB23 occurred 2 times: 11/11/80 @1900 & 2200
- (9) The 1-hour max. for Dec. at Station AB23 occurred 2 times: 12/07/80 @ 1100; 12/23/80 @ 0500
- (10) The 1-hour max. for Feb. at Station AB20 occurred 2 times: 2/10/81 @ 0100; 2/26/81 @ 0900
- (11) The 1-hour max. for April at Station AB23 occurred 3 times: 4/3/81 @ 0900, 1000, 1100.

COLORADO CLIMATOLOGICAL DATA

STATION: WR01

PRECIPITATION (inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	T				.45		.32					
2	.08						.60	.02				
3												
4			.10		.05							
5								T				.02
6			.67		.15							.21
7	T	.16	.11		.45				T			.02
8	T				.04		.23		.35			T
9	T								.05			T
10	.07				.04				T			
11	T				.54				.26			
12	.05		.04		.26		.02		.02			
13	T				.05					.11	.19	
14	.22	T			.10			.03		.07	T	
15	.05	.17			.04			.50		.61	T	
16	.04	.02	.26		.07			.03		.04		
17	T	T			.47					.23		
18	.06	.41			.01					.03		
19	.01	.06										
20		.38							.13			
21		T										
22		.10	.20		.05							
23		.15										.08
24							.02	.85			.30	
25			.35				.18					
26	T		.09					.14			.19	
27								.24		.07		
28	.38		.01							.04		
29	.19	.16										
30			.02				.01					
31			.22									
TOTAL	1.15	1.61	2.07	--	2.77	--	1.38	1.81	.81	1.20	.68	.33





STATION: WR01

PRECIPITATION (Inches)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		.10										
2												
3												
4												
5	.08											
6	.02											
7	T											
8												
9												
10		.55										
11												
12												
13												
14												
15		.02										
16												
17												
18		T										
19												
20												
21		.06										
22												
23												
24												
25	.04											
26												
27		.03										
28												
29	.06											
30												
31												
TOTAL	.20	.76										

# COLORADO CLIMATOLOGICAL DATA

STATION: WR02

PRECIPITATION (inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1								.12				
2	.19			.12	.15		1.14	.02				
3				T	T							
4			.17		.10							
5												
6			.35		.20							
7		.02	.18	T					.05			.03
8	T		.07		.21		.02		.07			
9			.05		T							T
10	.10			.05					.30			
11					.23							
12	.07		.31		.27		.02					
13					.15		.34	T		.24	.38	
14	.30							.05		.16		
15	.05	.05						.63		.45		
16	.07	.10	.07		T			.02		.21		
17					.45					.63		
18		.50								.03		
19												
20		.34							.11			
21		.32										
22		.25	.12									
23		.27										.09
24							.08	.20			.10	
25			.20					.07				
26	.01		.07					.20				
27	.42							.12		.15		
28	.15											
29	.05	.37					.03					
30			T	.38								
31			.23									
TOTAL	1.41	2.22	1.82	.55	1.76	.00	1.63	1.43	.53	1.87	.48	.12

STATION: WR02

PRECIPITATION (Inches)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		.16	1.0									
2					T							
3			.06	.20	1.40							
4				.03								
5	.17											
6					.45							
7			.55		.03							
8					.01							
9												
10		.15										
11					.20							
12			T									
13												
14												
15												
16					.26							
17			.43		.24							
18			.02		.02							
19				T								
20		.04										
21		T	.29									
22				.16	.13							
23												
24			.14									
25	T											
26		T			.05							
27			.08									
28			.25		.03							
29	.02											
30	.09		.40									
31	T		T		.15							
TOTAL	.28	.35	3.22	.39	2.97							



## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

 STATION: WR03

Precipitation (Inches)

 YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	↑	↑	↑	↑	↑	↓	↑					↓
2						↑						↓
3						0						↑
4												
5												
6									.03			
7						0						
8									.19			
9												
10									.30			
11											↑	
12						0				.30		
13						↑		.05				
14								.02		.80		
15	No record	No record	No record	No record	No record			.20		.27		
16										.40		
17							↓					
18	No record	No record	No record	No record	No record							
19												
20												
21											.82"	.55"
22						No record						
23							.32	.44				
24							.34					
25								.08				
26										.04		
27										.26		
28												
29		↓										
30	↓	X		↓		X						
31	↓	X	↓	X	↓	X					↓	↓
TOTAL												

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WR03

Precipitation (Inches)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	Clock Stopped 12-4 to 1-12 No Record accumulated precip=.55"	.12										
2			.18		.40							
3			.10	.45	.47							
4			.27	.05								
5					.33							
6			.36		.10							
7			.02									
8					.17							
9												
10		.12										
11												
12												
13	No Record .10 accumulation				.13							
14				.05								
15				.05	.05							
16			.14		.15							
17			.05		.24							
18												
19												
20		.13	.20		.42							
21		.03	.04	.05	.10							
22												
23												
24			.10		.07							
25	.01											
26		.32	.40									
27			.20									
28			.15									
29	.18		.14									
30	.08		.27									
31	.25											
TOTAL												

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WR04

Precipitation (Inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				↑	.01		No					
2	.02				.05	0	Record					
3	.01					0						
4			.25		.10	0						
5				↓	.30	0						.35
6			.33	No Record	.17	0			.02			.07
7	.06	.17	.29	No Record	.34				.05			.06
8				↓	.17				.09			.01
9									.11			
10	.19				.39				.45			
11					.58							
12	.25		.04		.32					.30	.31	
13										.20	.03	
14	.16				.06					.66	.07	
15	.02	.12								.45		
16	.02				.45					.61		
17	.02	.01				No Record		No				
18	.10	.57				No Record		Record				
19	.02	.10				No Record						
20		.84				No Record						
21	.01	.05				No Record						
22		.43				No Record		1.30				.04
23		.35		.02		No Record					.20	.20
24	.01					No Record		.45			.05	
25						No Record						
26						No Record				.08		
27						No Record				.15		
28	.60	.02				No Record						
29	.21	.11		.58		No Record						
30		X	↑	X	10	↓			X			
31		X		X		X			X			
TOTAL												



## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WR04

Precipitation (Inches)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		.10				↓						
2			.27									
3			.09	.80								
4	.07		.02									
5	.21											
6			.93									
7			.01	.10								
8			.15									
9		.12	.03									
10												
11												
12												
13												
14	.01											
15	.02			.15								
16			.40	.05								
17			.17									
18				.03								
19												
20		.05	.42									
21												
22												
23												
24	.13		.20									
25												
26		.28	.20									
27			.20									
28			.05									
29	.20		.20									
30	.12		.28									
31	.35											
TOTAL												



## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WR05

Precipitation (Inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1			.21	↑	.04		.24					
2			.07		.20		.33					
3			.64	NO DATA	.05							
4			.31		.20							
5	.05		.06	NO DATA	.12			.07				
6			.03		.15							
7	.05		↑	↓	.24		.19					
8	.04	.13										
9	.25				.27							
10	.21				.49							
11	.07			.09	.75	—						
12	.15				.46		.07	.10				
13	.05						.15	.03				
14	.08	.17			.29			—				
15	.07	.08			.06							
16		.04			.27							
17			NO DATA		.76							
18	.03	.03										
19	.05	.07										
20		.34										
21		.58										
22		.05										
23		.04										
24		.02			.07							
25							.38					
26	.05											
27												
28	.51	.52										
29	.62	.39		.24								
30				.40		.03						
31			↓	—		—						
TOTAL	2.28	2.73	1.32*	.73*	4.42	.03	1.36					

\*Missing Data

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WR06

Precipitation (Inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		.07	.02	.04	.10		.13					
2				.10			.42					
3			.06									
4			.11									
5			.02									.15
6			.10						.01			.15
7		.05	.35	.02	.05		.19					.26
8			.04	.21	.05							
9	.05				.05				.05			.03
10	.03				.21				.27			
11	.53				.18				.01			
12	.15		.13		.35		.02	.08		.28	.29	
13		.02			.06		.20	.07		.10	.31	
14	.20	.35			.03			.06		.65	.03	
15	.10	.16	.02		.04			.84		.23		
16		.10	.03							.73		
17			.07		.36					.12		
18	.11	.30			.02							
19		.10										
20		.25										
21		.10						.01				
22		.10	.12								.02	.15
23		.12	.06					.29			.04	.05
24		.03	.10				.08				.27	
25		.02	.17		.05							
26			.05							.05		
27			.02							.10		
28	.82	.02										
29	.65	.04										
30	.03		.06	.28								
31	.05		.31									
TOTAL	2.72	1.83	1.84	0.65	1.55	0	1.04	1.35	0.34	2.26	0.96	.79

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WR06

Precipitation (Inches)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2					.65							
3				.72	.65							
4			↓	.08								
5	.30				.32							
6			.19		.18							
7			.03									
8					.06							
9					.12							
10												
11					.22							
12												
13												
14												
15	.05			.11	.06							
16	.11		.29		.12							
17			.02		.28							
18				.05	.01							
19												
20			.16		.13							
21			.21		.27							
22					.39							
23												
24			.13									
25					.05							
26			.10									
27			.13		.06							
28	↑		.24									
29			.01		.27							
30			.52									
31					.26							
TOTAL	.46		2.03	.96	4.10							



## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WR07

Precipitation (Inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				.23	.13		.16					
2				.13			.23					
3												
4												
5												.03
6			.16						.08			.02
7			.07				.22					.21
8			.01									
9												.02
10									.17			
11			.22									
12										.29	.30	
13							.24			.07	.39	
14										.50	.02	
15			.15							.07		
16	Chart Missing		.03							.44		
17										.35		
18									.08			
19												
20									.35			
21			.14									
22			.23								.03	.06
23			.03		.04							.14
24			.32		.06						.17	
25			.39								.11	
26							.57			.03		
27										.08		
28			.02						.28			
29			.02	.40								
30			.32	.12			.04					
31												
TOTAL			2.11	0.88	0.10	0	1.46	0	.96	1.83	1.02	.48



## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WR07

Precipitation (Inches)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2												
3												
4												
5	.30											
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
TOTAL												

# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WR08

Precipitation (Inches)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	↑					↓						
2												
3												
4					↓							
5					↓							
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16			2.88									
17												
18						.98						
19												
20												
21												
22												
23												
24												
25												
26												
27						↓						
28						↓						
29					↓	↓						
30					1.73	.32						
31												
TOTAL												

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WR08

Precipitation (Inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						↗	↖					
2							↖					
3							↖					
4						0.00	↖					
5							↖					
6												
7												
8							↖					
9												
10					1.55							
11						↖						
12												
13					↖			1.60				
14							.03					
15												
16					.58							
17	Winter	Shutdown				0.00						
18												
19					↖							
20												
21												
22												
23												
24					0.00	↖						
25							↖					
26												
27								↖				
28						.11						
29												
30												
31					↖	↖						
TOTAL												



UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WU15

Precipitation (Inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
TOTAL												


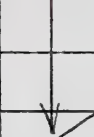



UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WU15

Precipitation (Inches)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
TOTAL												

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

 STATION: WU22

Precipitation (Inches)

 YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	↑	↑	↓	↑	—	↑	↓	↓	↓	↓	↓	
2					—							
3					.66		↓					
4			↓		—		↑	↓			↓	
5			↑				—					
6					↓		.09					
7					.20							
8					↑							
9					1.67							
10					—							
11							↓					
12							↑					
13					↓		.12					
14					—		—					.17
15					.62							
16	Winter	Shutdown					↓		—			
17			2.62				↑					
18												
19					↓							
20					↑							
21					1.04							
22					—							
23										↓		
24				↓			.30			↑		
25												
26												
27				0								
28				↓				1.03	.84	.63		
29		↓		↑								
30		×		↓		↓			×			
31	↓	×	↓	×		×	↓		×		×	×
TOTAL												

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WU22

Precipitation (Inches)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2												
3												
4												
5			1.11		1.83							
6												
7				.30								
8												
9												
10												
11		.25										
12												
13					.50							
14												
15			.30									
16												
17												
18				.11								
19												
20												
21												
22			.50		.27							
23												
24												
25												
26												
27												
28					.3							
29												
30												
31												
TOTAL												



# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WU50

Precipitation (Inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
TOTAL												



UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WU50

Precipitation (Inches)

YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
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28												
29												
30												
31												
TOTAL												

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

STATION: WU58

Precipitation (Inches)

YEAR: 1980

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1						↑						
2					.88			.08				
3										↓		
4								↓			↓	
5			↓									
6					↓							
7												
8							↓					
9					1.40	1.12	↑					↓
10												↑
11												
12										1.17		
13					↓		.44					
14					↓							
15					↓							
16					.33		↓					.14
17				↓			↓		↓		.68	
18	Winter	Shutdown										
19												
20					↓							
21				.02								
22			2.18				.20	1.20		↓		
23				↓								↓
24				↓								
25												
26												
27				0					0	.14		
28				↓			↓					
29				↓			↓					
30		X				↓						
31		X	↓	X		X		↓	X		X	
TOTAL												

# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

 STATION: WU58

Precipitation (Inches)

 YEAR: 1981

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1												
2												
3			.31	1.22								
4					.83							
5												
6												
7												
8												
9												
10					.19							
11												
12												
13		.24	.27									
14												
15												
16					.39							
17												
18												
19												
20												
21												
22			.29	.15								
23												
24												
25												
26					.50							
27												
28												
29												
30												
31												
TOTAL												







### 2.3.3.3 Wind Fields

This section presents the wind field data collected at the meteorological tower Station AA23 and Stations AB20, AD42 and AD56. Data consist of wind speeds, wind direction, vertical variations in horizontal wind speed and wind direction and stability class. Wind flow patterns and stability class provided information for diffusion modeling and pollutant transport and concentration.

<u>Table/Figure No.</u>	<u>Description</u>	<u>Page No.</u>
Table 2.3.3.3-1	Wind Speed and Direction at Station AB20	II-81
Table 2.3.3.3-2	Wind Speed and Direction at Station AA23 (10 meter level)	II-82
Table 2.3.3.3-3	Wind Speed and Direction at Station AA23 (30 meter level)	II-83
Table 2.3.3.3-4	Wind Speed and Direction at Station AA23 (60 meter level)	II-84
Table 2.3.3.3-5	Wind Speed and Direction at Station AD42	II-85
Table 2.3.3.3-6	Wind Speed and Direction at Station AD56	II-86
<u>Meteorological Summary</u>		
Table 2.3.3.3-7	Vector Monthly Averages for Winds, Station AB20	II-87
Table 2.3.3.3-8	Vector Monthly Averages for Winds, Station AA23 (10 meter level)	II-88
Table 2.3.3.3-9	Vector Monthly Averages for Winds, Station AA23 (30 meter level)	II-89
Table 2.3.3.3-10	Vector Monthly Averages for Winds, Station AA23 (60 meter level)	II-90
<u>Direction-Only Wind Roses</u>		
Figure 2.3.3.3-1	Direction-only wind roses for Station AB20 for period January 1980 - April 1981.	II-91
Figure 2.3.3.3-2	Direction-only wind roses for Station AB23 at the 10 meter level of the meteorological tower for the period January 1980 - April 1981.	II-93
Figure 2.3.3.3-3	Direction-only wind roses for Station AA23 at the 30 meter level of the meteorological tower for the period January 1980 - April 1981.	II-95
Figure 2.3.3.3-4	Direction-only wind roses for Station AA23 at the 60 meter level of the meteorological tower for the period January 1980 - April 1981.	II-97

### 2.3.3.3 Wind Fields (Continued)

<u>Table/Figure No.</u>	<u>Description</u>	<u>Page No.</u>
<u>Wind Rose Diagrams</u>		
Figure 2.3.3.3-5	Quarterly wind rose for Station AB20 for the quarter beginning December 1980	II-99
Figure 2.3.3.3-6	Quarterly wind rose for Station AA23 at the 10 meter level of the meteorological tower for the quarter beginning December 1980	II-100
Figure 2.3.3.3-7	Quarterly wind rose for Station AA23 at the 30 meter level of the meteorological tower for the quarter beginning December 1980	II-101
Figure 2.3.3.3-8	Quarterly wind rose for Station AA23 at the 60 meter level of the meteorological tower for the quarter beginning December 1980	II-102
<u>Atmospheric Stability</u>		
Table 2.3.3.3-11	This table presents Pasquill-Gifford average hourly atmospheric stability class for each month. Ranges of $dT/dz$ (variation of temperature with height) corresponding to each class are defined on the table. The source is the temperature difference from 60 meter to 10 meter on the meteorological tower, designated DT2, corrected for wind speed (10 meter).	II-103
Table 2.3.3.3-12	This table shows the stability class frequency distribution for each month.	II-104

METEOROLOGICAL SUMMARY: WIND SPEED & DIRECTION

Station AB20

Table 2.3.3.3-1

(1979-1980)

ITEM	MONTH											
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Wind Speed, Hourly Max. (mps) &	8.0	6.0	11.0	10.0	6.0	7.0	8.0	6.0	6.0	8.0	6.0	8.0
Associated Direction (Deg.)	289.0	118.5*	230.0	118.9	282.7*	275.2	155.9*	216.5*	106.0	286.5*	272.8*	286.0
Wind Speed, Hourly Avg. (mps) &	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Wind Direction Hourly Avg. (Deg)	109.0	93.0	124.0	104.0	143.0	106.0	119.0	136.0	122.0	126.0	115.0	107.0

(1980-1981)

ITEM	MONTH											
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Wind Speed, Hourly Max. (mps) &	8.0	6.0	6.0	7.0	7.0	5.0						
Associated Direction (Deg.)	282.0	174.5*	294.0*	118.0	153.0	193.0						
Wind Speed, Hourly Avg. (mps) &	2.0	2.0	2.0	2.0	2.0	2.0						
Wind Direction Hourly Avg. (Deg)	116.0	297.0	298.0	302.0	239.0	145.0						

\* Maximum wind speed was reached >1 time. Associated Direction was computed as a vector mean.



Table 2.3.3.3-2

METEOROLOGICAL SUMMARY: WIND SPEED & DIRECTION  
STATION AA23  
(10 Meter Height)

(1979-1980)

ITEM	MONTH									
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG
Wind Speed, Hourly Max. (mps)	6.0	10.0	13.0	9.0	10.0	8.0	12.0	10.0	7.0	8.0
&										
Associated Direction (Deg.)	196.6	16.0	219.0	220.0	199.0*	250.0*	195.5*	213.0*	227.5*	241.4*
Wind Speed, Hourly Avg. (mps)	2.0	2.0	3.0	2.0	3.0	2.0	3.0	3.0	2.0	3.0
&										
Wind Direction Hourly Avg. (Deg.)	186.0	186.0	231.0	208.0	240.0	246.0	215.0	225.0	217.0	227.0
										245.0

(1980-1981)

ITEM	MONTH									
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG
Wind Speed, Hourly Max. (mps)	8.0	11.0	9.0	8.0	10.0	8.0				
&										
Associated Direction (Deg.)	218.8*	185.0	183.0	193.0	196.0	187.0				
Wind Speed, Hourly Avg. (mps)	2.0	2.0	2.0	2.2	2.0	3.0				
&										
Wind Direction Hourly Avg. (Deg.)	203.0	207.0	227.0	299.0	230.0	233.0				

\* Maximum wind speed was reached  $\geq 1$  time. Associated direction was computed as a vector mean.

Table 2.3.3.3-3

METEOROLOGICAL SUMMARY: WIND SPEED &amp; DIRECTION

STATION AA23

(30 Meter Height)

(1979-1980)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Wind Speed, Hourly Max. (mps) & Associated Direction (Deg.)	9.0 199.5*	11.0 (1)	18.0 218.0	13.0 217.0	15.0 190.0	11.0 209.0	15.0 188.5	13.0 215.0	10.0 219.0*	12.0 236.0	13.0 225.0*	13.0 195.0
Wind Speed, Hourly Avg. (mps) & Wind Direction, Hourly Avg (Deg.)	2.0 202.0	3.0 165.0	4.0 227.0	3.0 204.0	4.0 222.0	3.0 223.0	4.0 207.0	5.0 222.0	3.0 206.0	4.0 220.0	4.0 243.0	3.0 259.0

(1980-1981)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Wind Speed, Hourly Max. (mps) & Associated Direction (Deg.)	12.0 210.6*	16.0 195.0	12.0 183.0	11.0 111.0	13.0 188.	12.0 178.0						
Wind Speed, Hourly Avg. (mps) & Wind Direction, Hourly Avg (Deg.)	3.0 193.0	3.0 210.0	2.0 170.0	3.0 297.0	3.0 67.0	4.0 229.0						

\* Maximum wind speed occurred > 1 time.  
 (1) < 50% Data - (Instrument Malfunction)

Associated Direction was computed as a vector mean.

Table 2.3.3.3-4

## METEOROLOGICAL SUMMARY: WIND SPEED &amp; DIRECTION

STATION AA23

(60 Meter Height)

(1979-1980)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Wind Speed, Hourly Max. (mps)	9.0	11.0	16.0	12.0	12.0	10.0	14.0	11.0	9.0	11.0	12.0	12.0
& Associated Direction (Deg.)	194.0*	191.7*	221.0*	220.0	208.3*	223.0	202.1*	230.0*	227.1*	245.0	241.0	209.0
Wind Speed, Hourly Avg. (mps)	2.0	2.0	4.0	3.0	4.0	3.0	4.0	5.0	3.0	4.0	3.0	3.0
& Wind Direction Hourly Avg.	228.0	189.0	234.0	209.0	231.0	245.0	227	241.0	228.0	241.0	259.0	281.0

(1980-1981)

ITEM	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Wind Speed, Hourly Max. (mps)	12.0	14.0	11.0	13.0	15.0	14.0						
& Associated Direction (Deg.)	221.8*	210.0	63.0	60.0	197.0	188.0						
Wind Speed, Hourly Avg. (mps)	3.0	3.0	2.0	4.0	4.0	5.0						
& Wind Direction Hourly Avg.	225.0	232.0	116.0	173.0	83.0	243.0						

\* Maximum wind speed occurred >1 time. Associated Direction was computed as a vector mean.  
 (1) <50% Data - Instrument Malfunction.

Table 2.3.3.3-5

METEOROLOGICAL SUMMARY: WIND SPEED & DIRECTION  
STATION AD42 (1)

(1979-1980)

ITEM	MONTH									
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG
Wind Speed, Hourly Max (mps)	9	9.0	13.0	9.0	13.0	13.0	14.0	13.0	(2)	13.0
&										
Associated Direction (Deg.)	219.7*	192.80*	230.0	239.0*	214.0	128.0	195.5*	247.0*	(2)	185.0
&										
Wind Speed, Hourly Avg. (mps)	2	2	2.0	3.0	3.0	3.0	4.0	4.0	(2)	4.0
&										
Wind Direction, Hourly Avg. (Deg.)	168.0	157.0	215.0	174.0	182.0	174.0	170.0	178.0	(2)	167.0
&										
Wind Direction, Hourly Avg. (Deg.)										

(1980-1981)

ITEM										
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG
Wind Speed, Hourly Max (mps)										
&										
Associated Direction (Deg.)										
&										
Wind Speed, Hourly Avg. (mps)										
&										
Wind Direction, Hourly Avg. (Deg.)										
&										
Wind Direction, Hourly Avg. (Deg.)										

\* Maximum wind speed was reached 1 time. Associated Direction was computed as a vector mean.

(1) Data not available at report time.

(2) &lt;50% Data



Table 2.3.3.3-6

METEOROLOGICAL SUMMARY: WIND SPEED & DIRECTION  
STATION AD56 (1)

(1978 - 1979)

ITEM	MONTH											
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Wind Speed, Hourly Max. (mps) & Associated Direction (Deg.)	(2)	(3)	(2)	(3)	6.0	9.0	9.0	9.0	9.0	7.0	(3)	9.0
	(2)	(3)	(2)	(3)	316.1*	182.0	325.0	144.3	160.5*	81.0	(3)	304.0
Wind Speed, Hourly Avg. (mps) & Wind Direction, Hourly Avg. (Deg.)	(2)	(3)	(2)	(3)	2.0	2.0	2.0	3.0	2.0	2.0	(3)	2.0
	(2)	(3)	(2)	(3)	129.0	150.0	181.0	167.0	156.0	171.0	(3)	186.0

(1979 - 1980)

ITEM	MONTH											
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT
Wind Speed, Hourly Max. (mps) & Associated Direction (Deg.)	5.0	4.0	7.0	5.0	9.0	9.0	9.0	9.0	(3)	9.0	(4)	
	301.7*	172.3*	192.0	99	318.0	318.0	172.8*	194.4*	(3)	229.6*	(4)	
Wind Speed Hourly Avg. (mps)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	(3)	3.0	(4)	
Wind Direction, Hourly Avg. (Deg.)	169.0	167.0	187.0	163.0	183.0	175.0	161.0	168.0	(3)	165.0	(4)	

\* Maximum wind speed was reached 21 time. Associated direction was computed as a vector mean.

(1) Monitoring of wind speed and wind direction at Station AD56 was initiated February 1, 1978.  
(2) Instrument out for repair.

(3) &lt;50% data.

(4) Data not available for this reporting period.

Table 2.3.3.3-7

METEOROLOGICAL SUMMARY: VECTOR MONTHLY AVERAGES FOR WINDS\*

(10 Meter Level)  
STATION AB20

(1979-1980 ) By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Wind Speed (mps)	1.0	1.0	.4	.5	.6	.4	1.0	1.1	.7	.6	.4	.4
Wind Direction (Deg.)	121.0	117.0	163.0	130.0	161.0	144.0	160.0	171.0	147.0	172.0	175.0	142.0

( 1980-1981 ) By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Wind Speed (mps)	.9	.9	.7	1.2	.8	.7						
Wind Direction (Deg.)	134.0	138.0	137.0	138.0	139.0	166.0						

\* Monitoring of wind parameters initiated on 2/1/78.

Table 2.3.3.3-8

METEOROLOGICAL SUMMARY: VECTOR MONTHLY AVERAGES FOR WINDS  
(10 Meter Level)  
STATION AA23

Item	By Month											
	( 1979-1980 )						( 1980-1981 )					
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Wind Speed (mps)	.8	.5	2.1	1.3	.7	.7	1.9	2.6	1.3	1.9	1.4	.8
Wind Direction (Deg.)	187.0	195.0	222.0	210.0	238.8	255.0	212.0	219.0	220.0	227.0	233.0	242.0

Item	By Month											
	( 1980-1981 )						( 1980-1981 )					
	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Wind Speed (mps)	1.1	1.5	0.9	1.4	1.0	1.9						
Wind Direction (Deg.)	214.0	204.0	221.0	210.0	210.0	221.0						

Table 2.3.3.3-9

## METEOROLOGICAL SUMMARY: VECTOR MONTHLY AVERAGES FOR WINDS

(30 Meter Level)

STATION AA23

( 1979-1980 ) By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Wind Speed (mps)	1.2	.8	2.9	1.9	1.3	.9	2.5	3.7	1.7	2.6	1.9	1.0
Wind Direction (Deg.)	195.0	183.0	218.0	206.0	214.0	237.0	203.0	213.0	210.0	219.0	228.0	237.0

( 1980-1981 ) By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Wind Speed (mps)	1.4	2.0	0.7	2.3	1.0	2.6						
Wind Direction (Deg.)	207.0	200.0	132.0	117.0	179.0	215.0						



Table 2.3.3.3-10

## METEOROLOGICAL SUMMARY: VECTOR MONTHLY AVERAGES FOR WINDS

(60 Meter Level)

STATION AA23

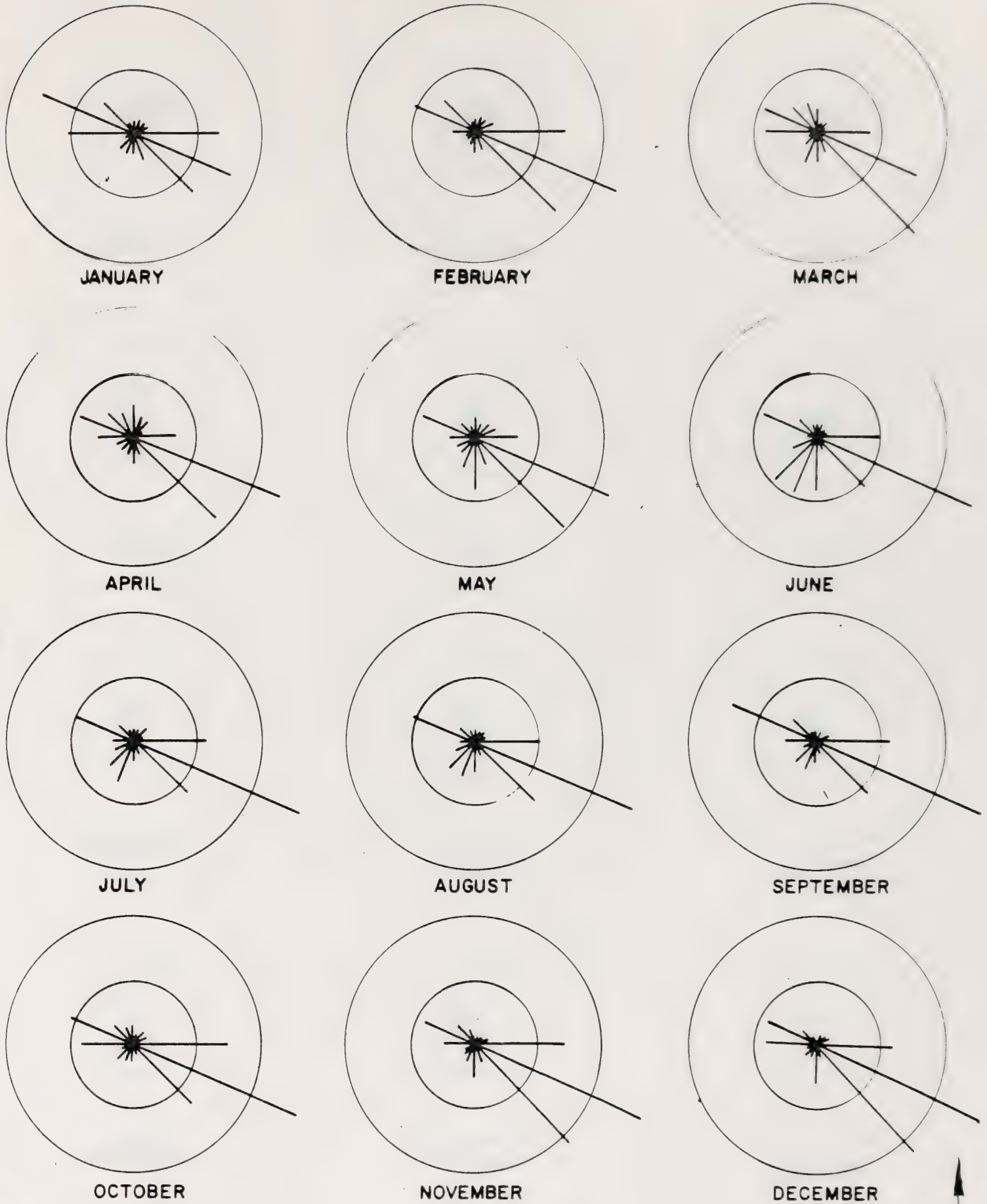
( 1979-1980 ) By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Wind Speed (mps)	.9	1.2	2.8	1.9	1.7	1.0	2.4	3.5	1.7	2.6	2.0	1.0
Wind Direction (Deg.)	204.0	195.0	221.0	211.0	222.0	252.0	219.0	228.0	228.0	234.0	242.0	252.0

( 1980-1981 ) By Month

Item	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
Wind Speed (mps)	1.8	2.3	0.6	2.6	1.3	3.1						
Wind Direction (Deg.)	224.0	219.0	96.0	84.0	207.0	225.0			.			

Figure 2.3.3.3-1

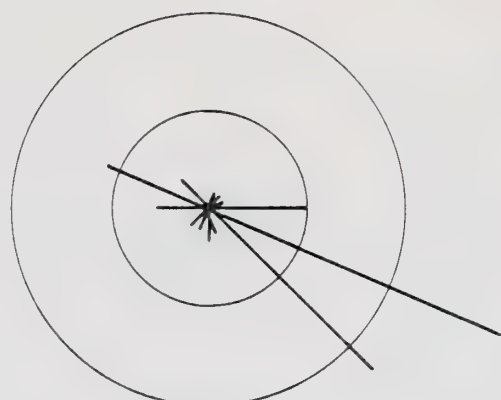


1980

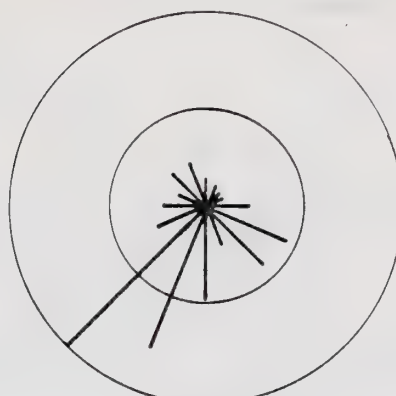
STATION AB20 @ IOM ELEVATION WIND ROSES



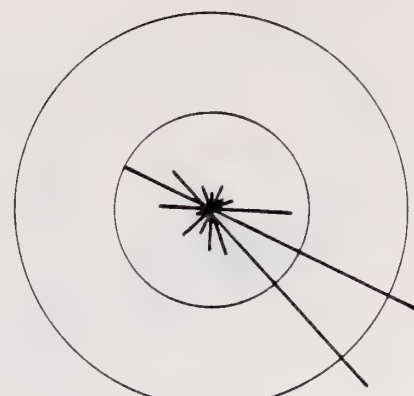
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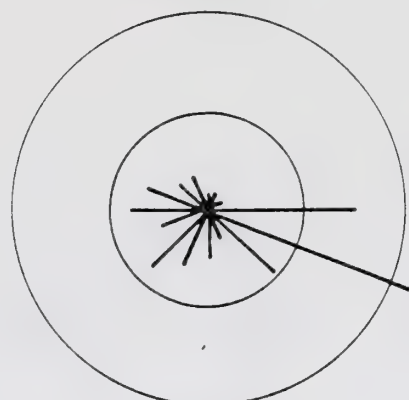
JANUARY



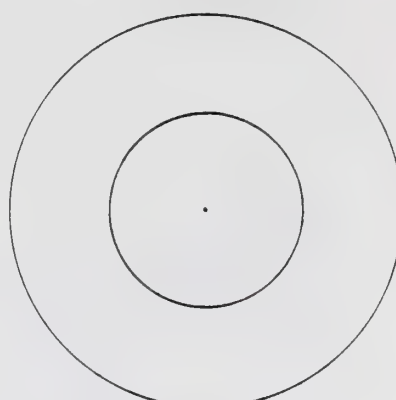
FEBRUARY



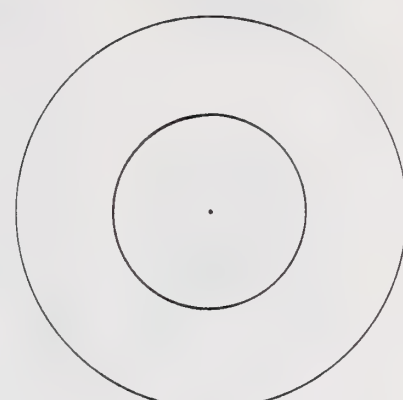
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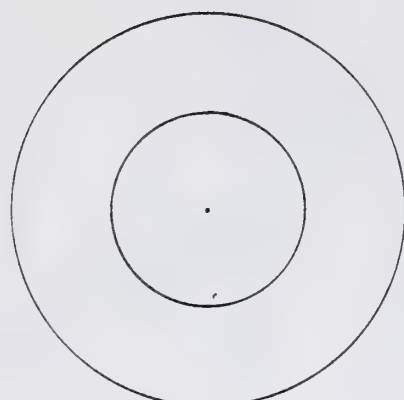
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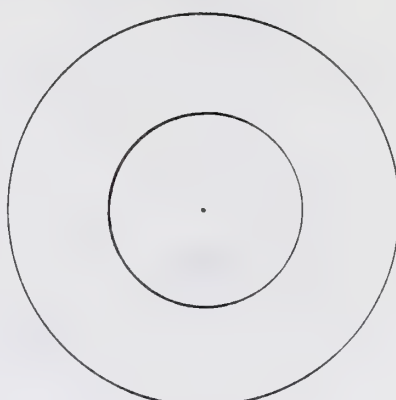
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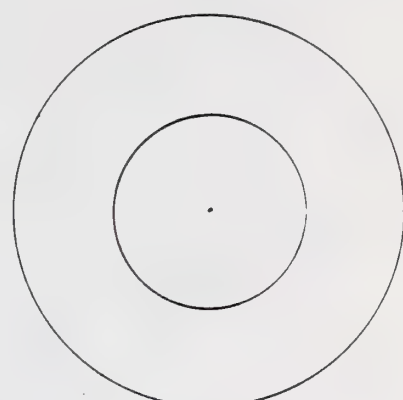
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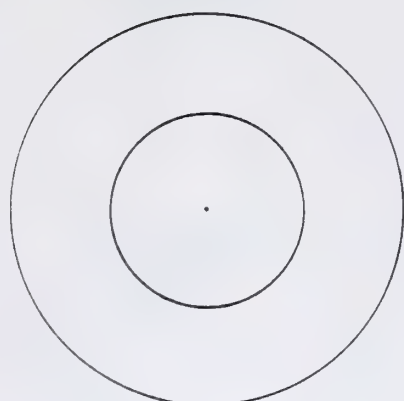
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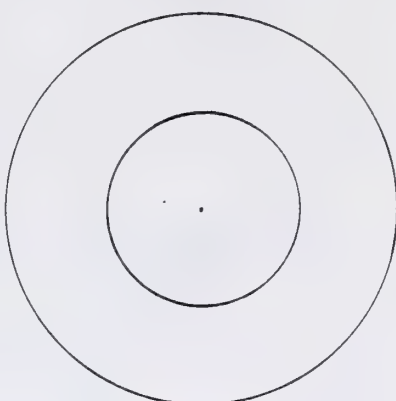
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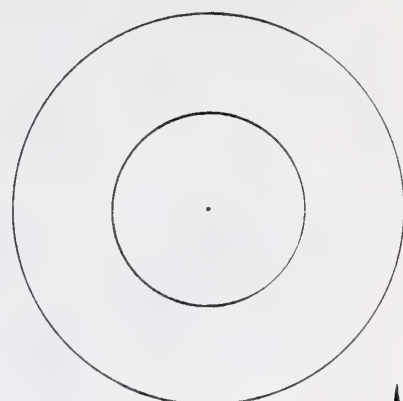
SEPTEMBER



OCTOBER



NOVEMBER



DECEMBER

1981

STATION AB20 @ 10M ELEVATION WIND ROSES



Figure 2.3.3.3-2



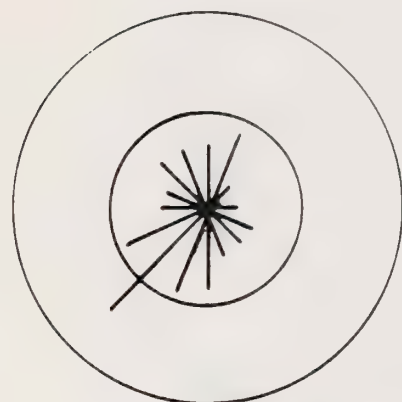
JANUARY



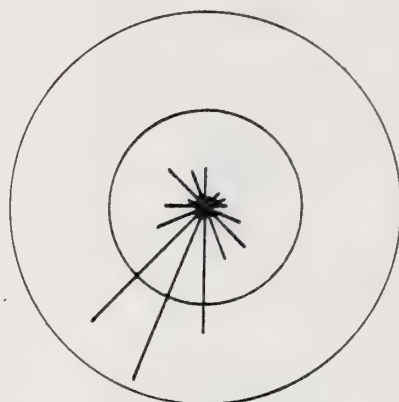
FEBRUARY



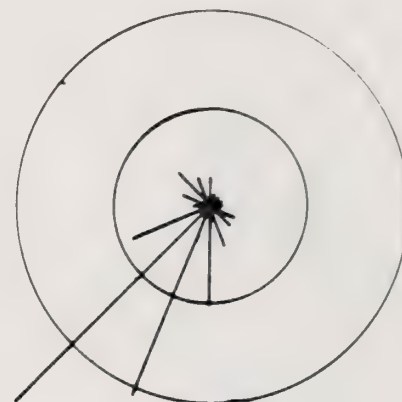
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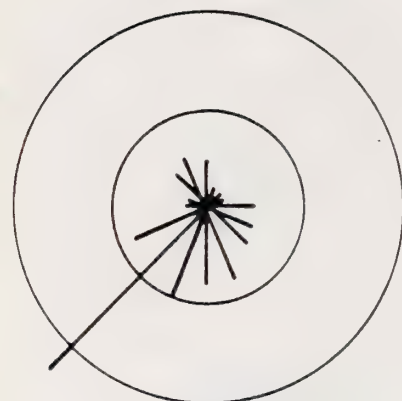
APRIL



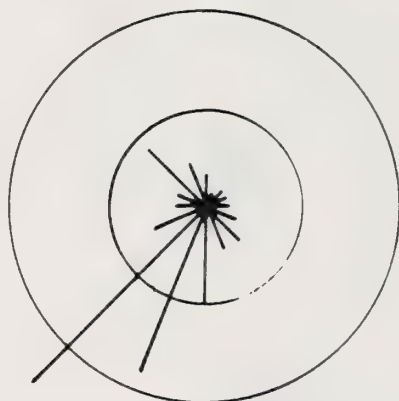
MAY



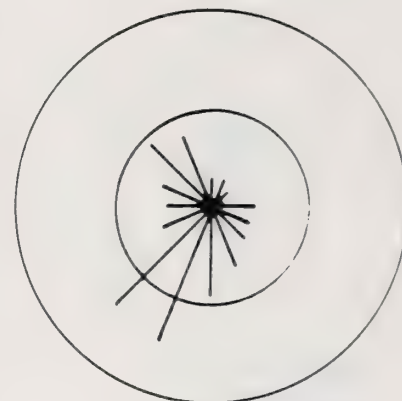
JUNE



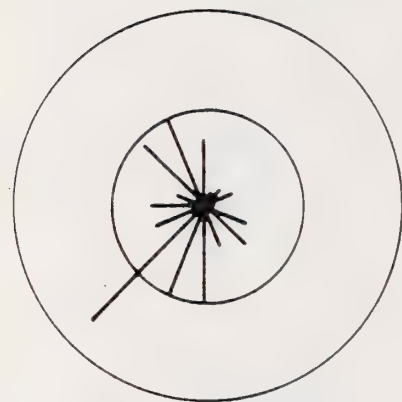
JULY



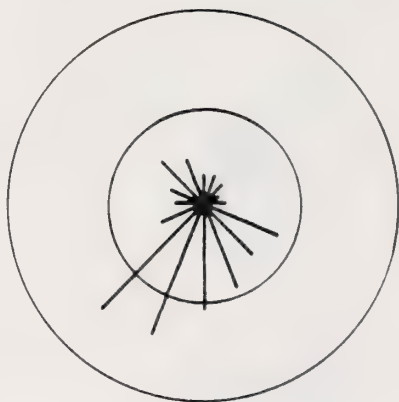
AUGUST



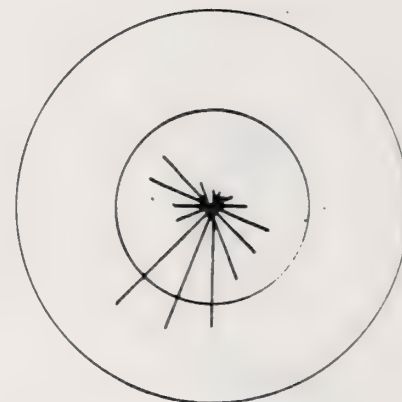
SEPTEMBER



OCTOBER



NOVEMBER



DECEMBER

1980

STATION AA23 @ 10M ELEVATION WIND ROSES

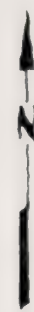
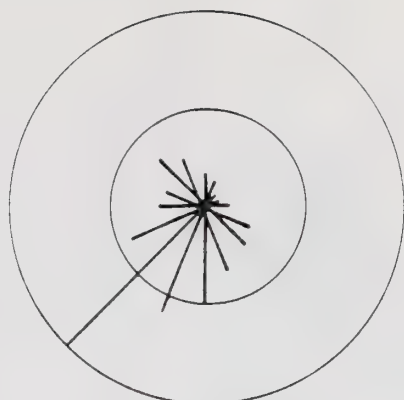
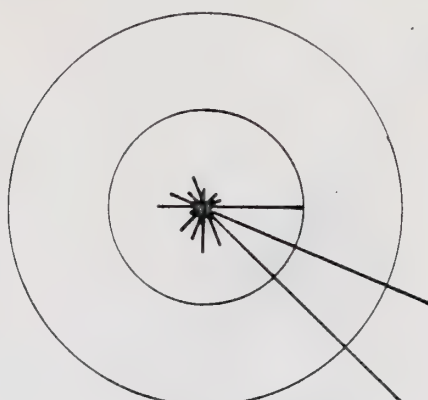




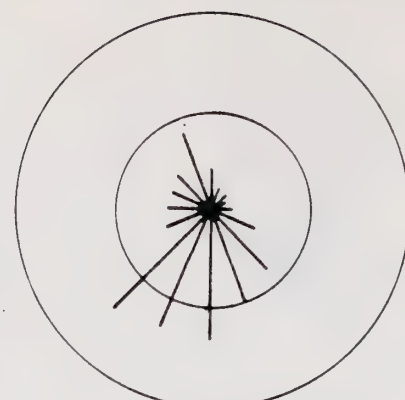
Figure 2.3.3.3-2 (Cont)



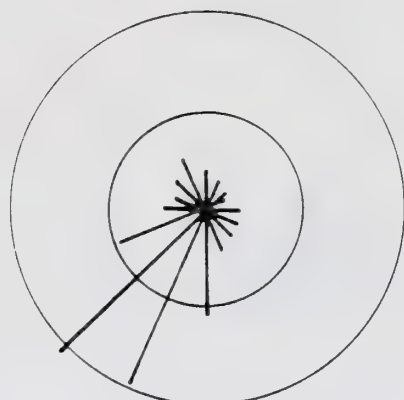
JANUARY



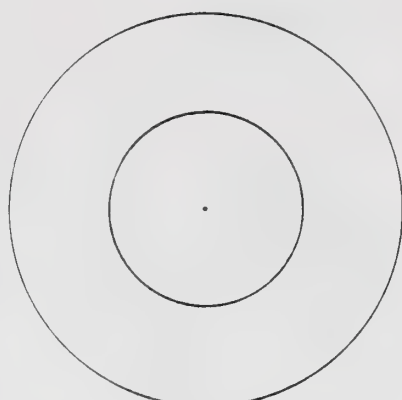
FEBRUARY



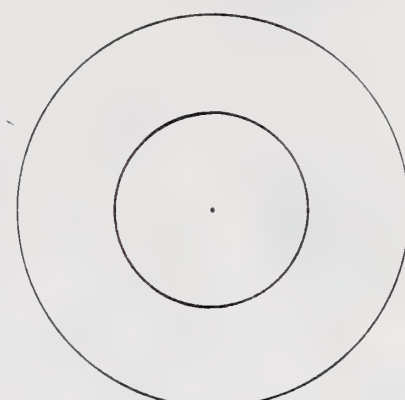
MARCH



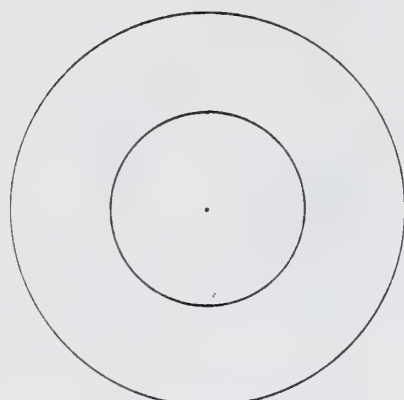
APRIL



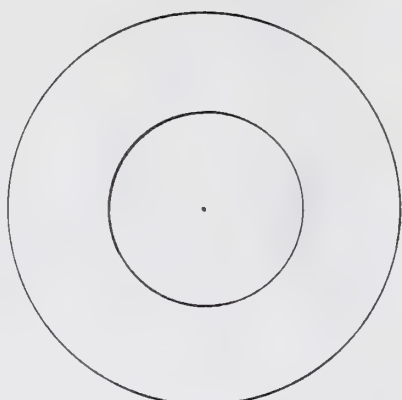
MAY



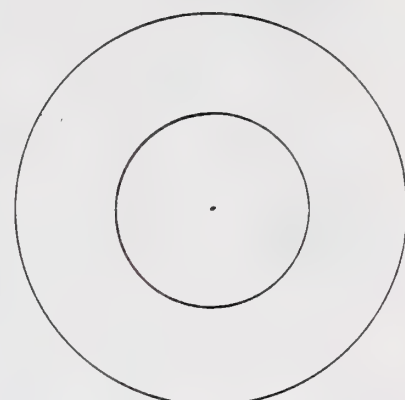
JUNE



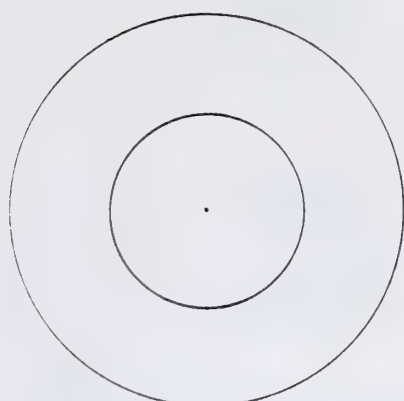
JULY



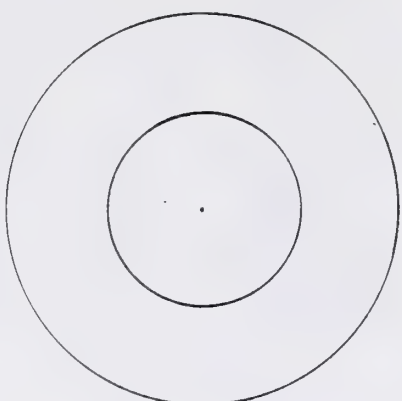
AUGUST



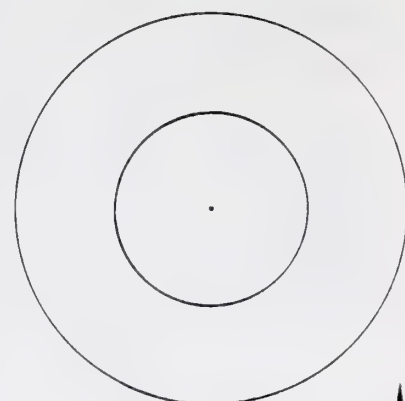
SEPTEMBER



OCTOBER



NOVEMBER



DECEMBER

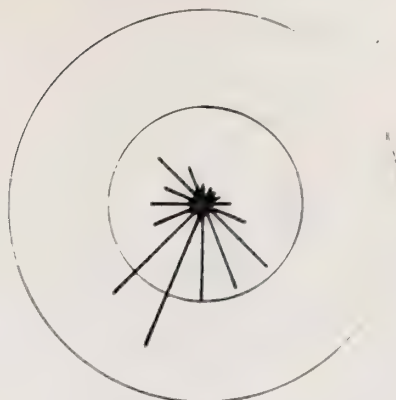
1981

STATION AA23 @ 10M ELEVATION WIND ROSES





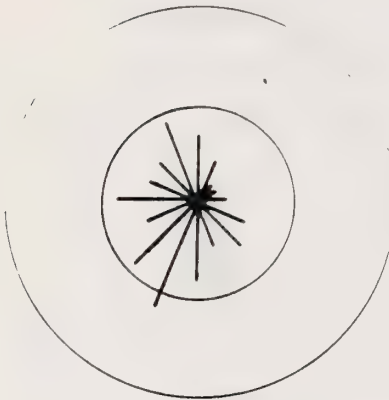
JANUARY



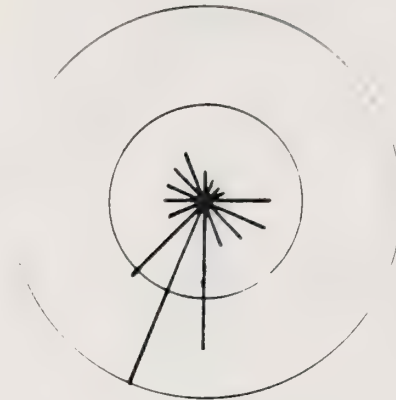
FEBRUARY



MARCH



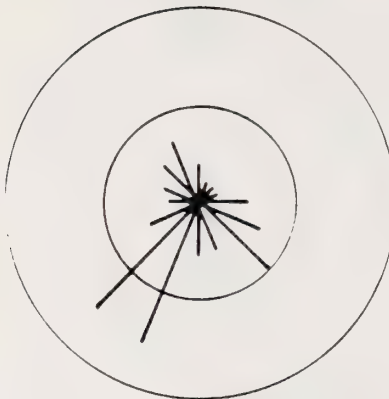
APRIL



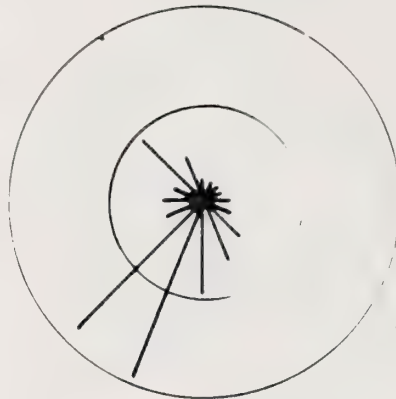
MAY



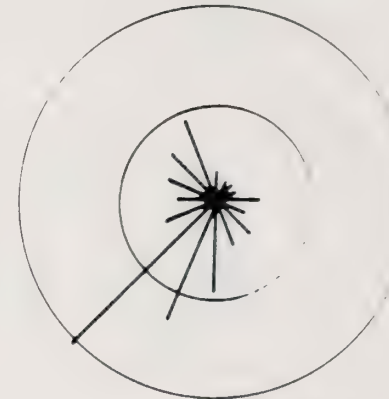
JUNE



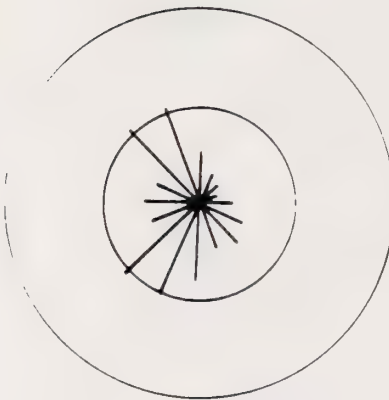
JULY



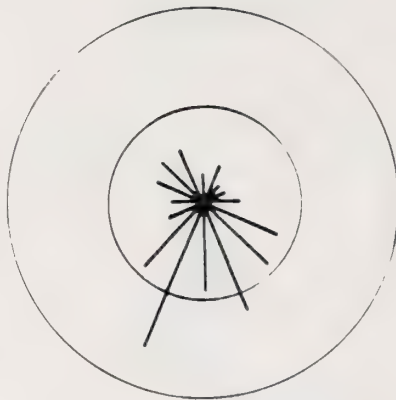
AUGUST



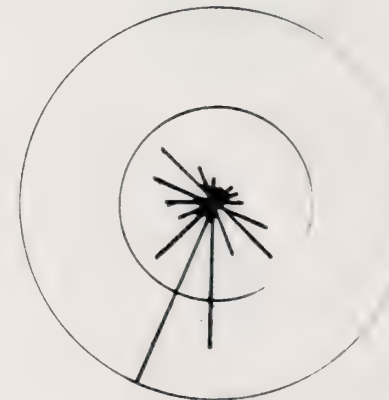
SEPTEMBER



OCTOBER



NOVEMBER

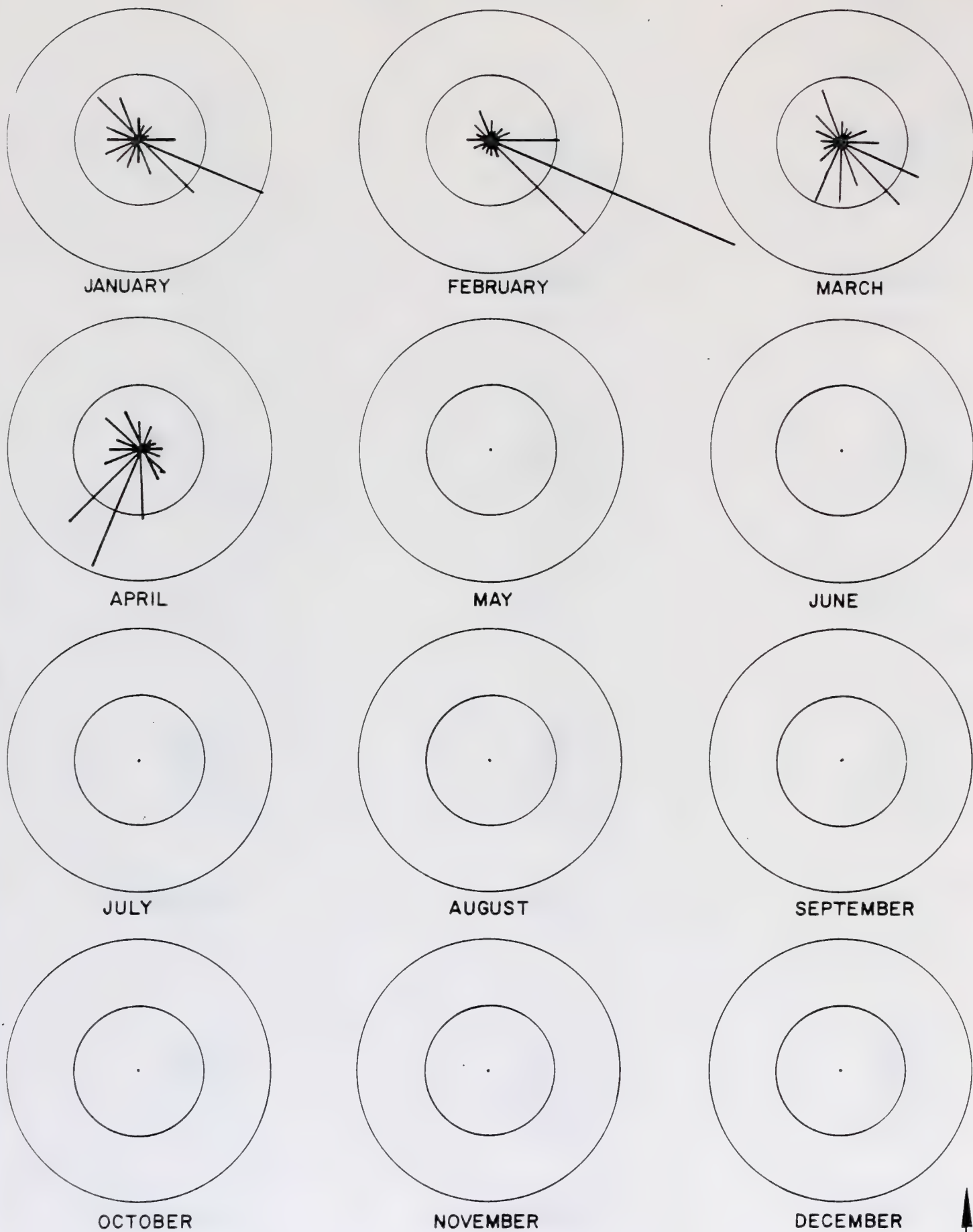


DECEMBER

1980

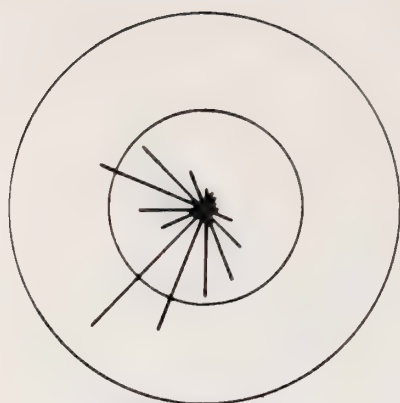
STATION AA23 @ 30M ELEVATION WIND ROSES

Figure 2.3.3.3-3 (Cont).

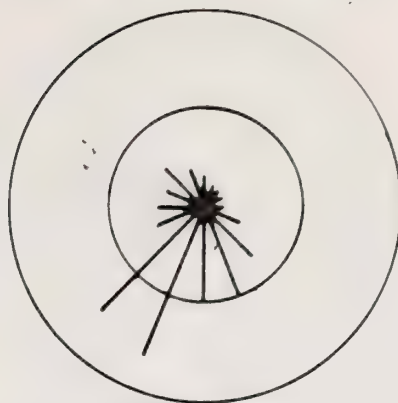


1981  
STATION AA23 @ 30M ELEVATION WIND ROSES

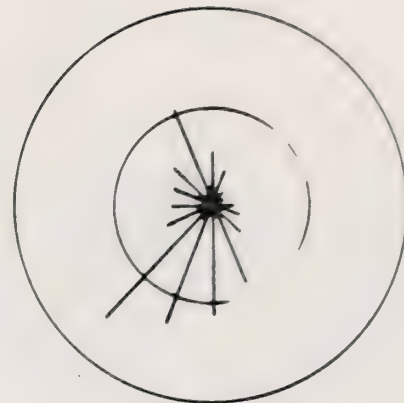
Figure 2.3.3.3-4



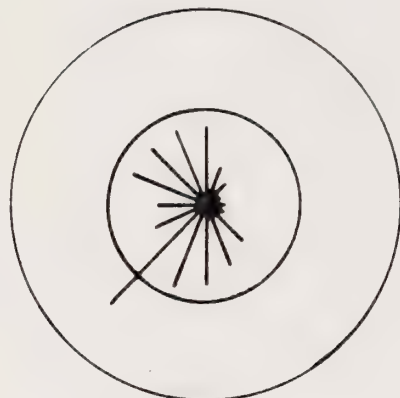
JANUARY



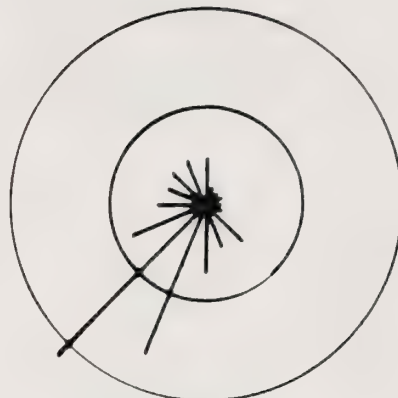
FEBRUARY



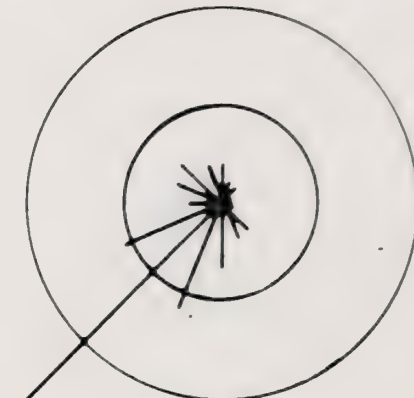
MARCH



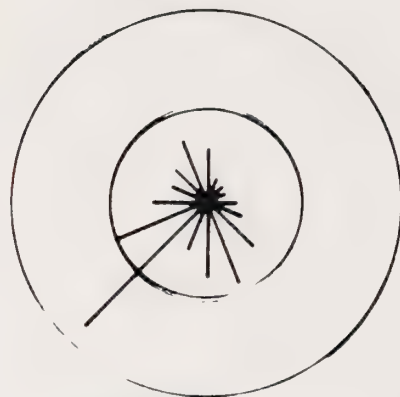
APRIL



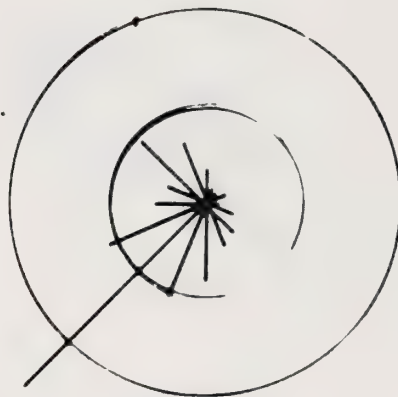
MAY



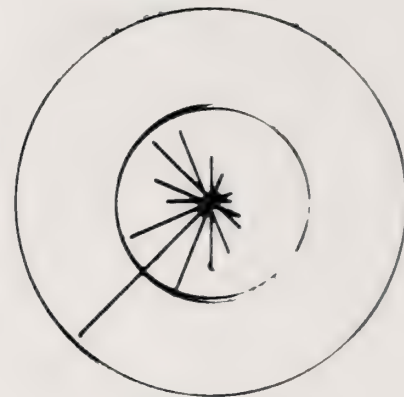
JUNE



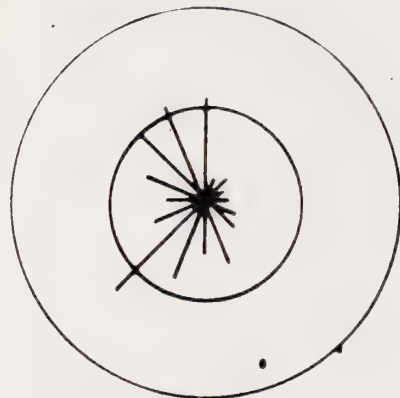
JULY



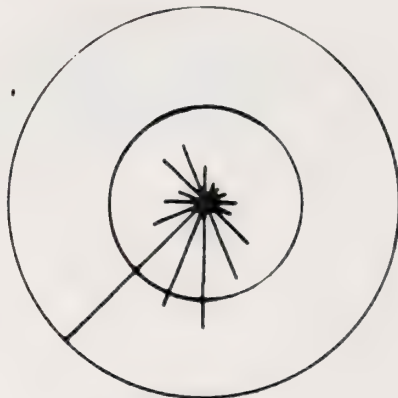
AUGUST



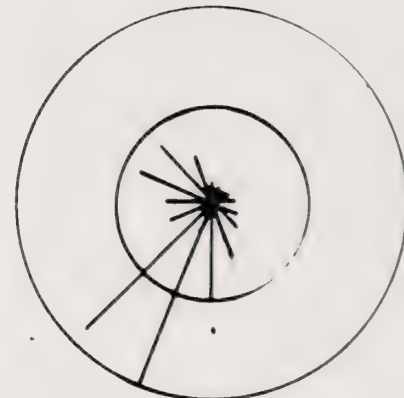
SEPTEMBER



OCTOBER



NOVEMBER



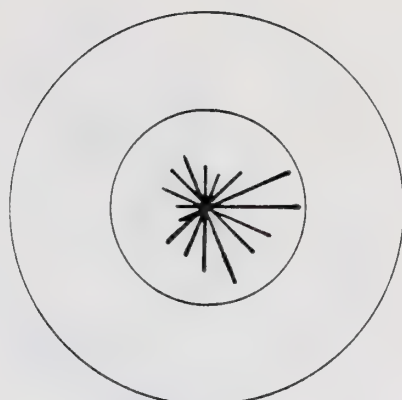
DECEMBER

1980

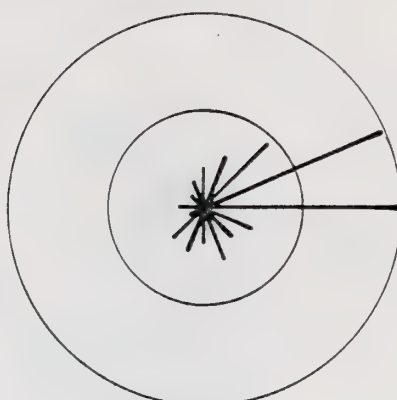
STATION AA23 @ 60M ELEVATION WIND ROSES



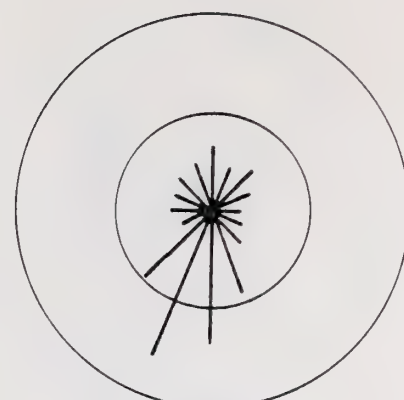
Figure 2.3.3.3-4 (Cont)



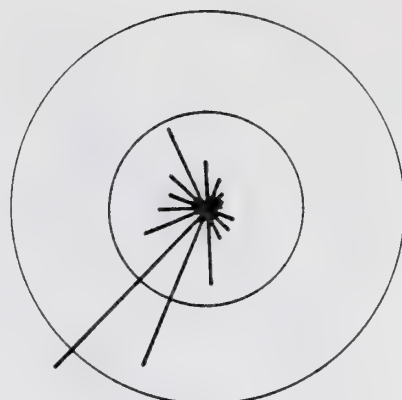
JANUARY



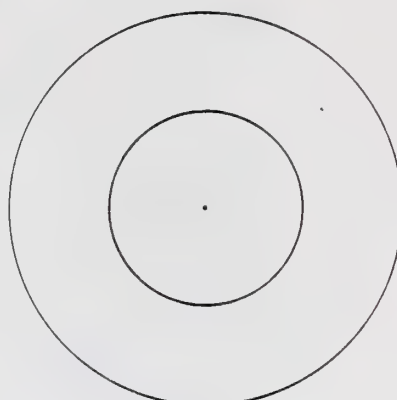
FEBRUARY



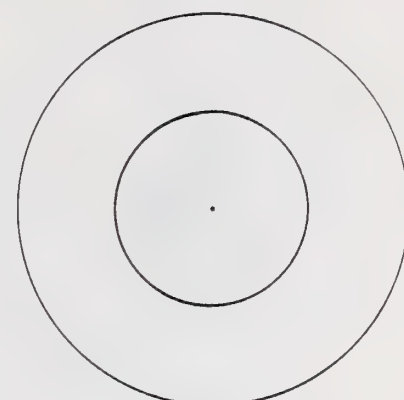
MARCH



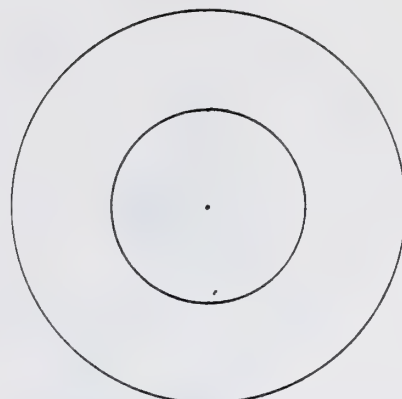
APRIL



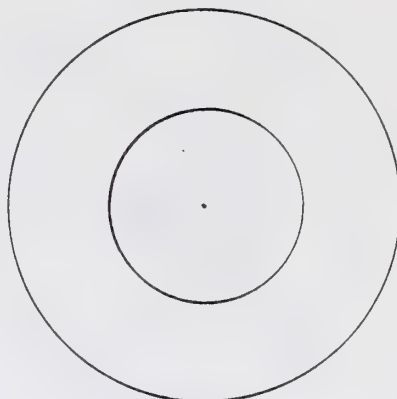
MAY



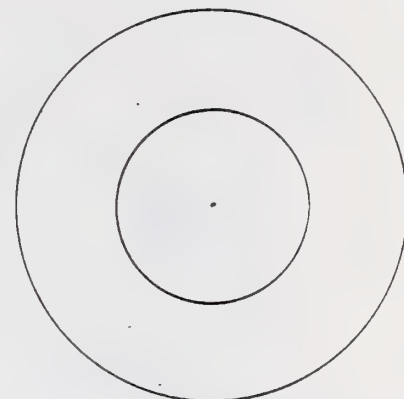
JUNE



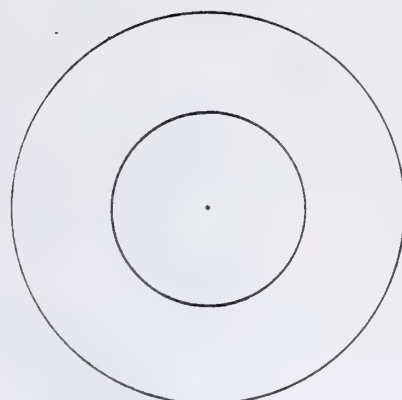
JULY



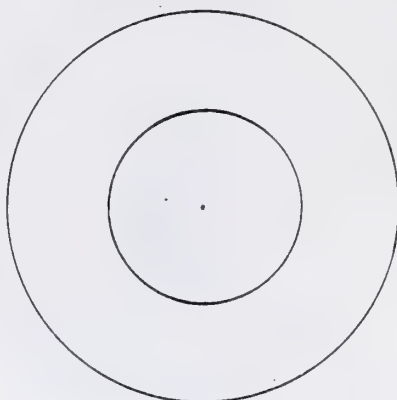
AUGUST



SEPTEMBER



OCTOBER



NOVEMBER



DECEMBER

1981

STATION AA23 @ 60M ELEVATION WIND ROSES

II- 98



Figure 2.3.3.3-5

AB20 QUARTERLY WIND ROSE • 10M  
DEC '80 - FEB '81

TOTAL % OF CALMS DISTRIBUTED (0-20%):  
TOTAL NO. OF 1-HOUR SAMPLES - 2009

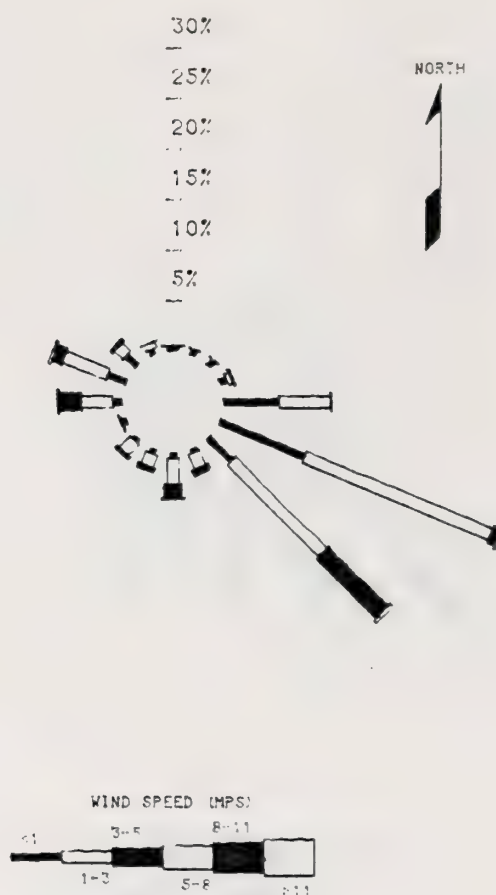


Figure 2.3.3.3-6

AA23 QUARTERLY WIND ROSE • 10M  
DEC '80 - FEB '81

TOTAL % OF CALMS DISTRIBUTED (0.03%)  
TOTAL NO. OF 1-HOUR SAMPLES - 2092



Figure 2.3.3.3-7

AA23 QUARTERLY WIND ROSE • 30M  
DEC '80 - FEB '81

TOTAL % OF CALMS DISTRIBUTED (0.29%)  
TOTAL NO. OF 1-HOUR SAMPLES - 2079





Figure 2.3.3.3-8

AA23 QUARTERLY WIND ROSE @ 60M  
DEC '80 - FEB '81

TOTAL % OF CALMS DISTRIBUTED (3.87%)  
TOTAL NO. OF 1-HOUR SAMPLES - 2095

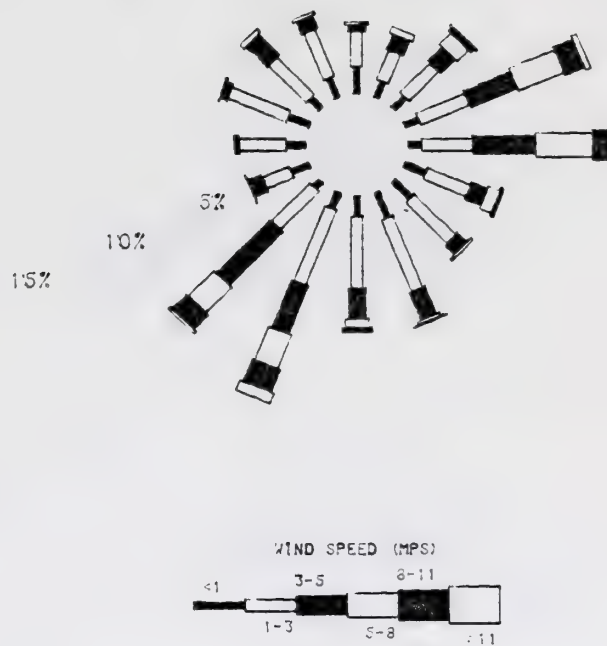


Table 2.3.3.3-11

## METEOROLOGICAL SUMMARY: STABILITY CLASS FREQUENCIES (%)

Source: Met Tower<sup>1</sup>  
(10m to 60m)

Pasquill-Gifford Stability Class	dT/dz Range <sup>1</sup> for this Stability Class (°C/100m)	1979		1980										Annual Mean
		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	
A	<-1.9	.5	.6	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.0	1.3	1.7	0.4
B	-1.9 to -1.7	.7	.3	.4	.3	.4	5.4	6.6	9.0	9.8	13.7	11.9	13.7	6.0
C	-1.7 to -1.5	.7	.1	.3	0.0	.1	4.0	10.1	13.0	10.8	11.4	9.2	9.6	5.8
D	-1.5 to -0.5	17.8	22.5	48.3	28.5	47.3	39.6	42.0	28.9	26.8	27.5	25.8	23.2	31.5
E	-0.5 to 1.5	49.5	37.4	34.0	47.3	39.0	31.0	25.1	22.7	24.0	21.1	23.2	22.3	31.4
F	>1.5	30.8	39.1	17.0	23.9	13.2	20.0	16.2	26.1	28.4	26.3	28.6	29.5	24.9
Total Percentage		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Pasquill-Gifford Stability Class	dT/dz Range <sup>1</sup> for this Stability Class (°C/100m)	1980		1981										Annual Mean
		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	
A	<-1.9	1.4	0.3	0.4	0.3	0	0.3							
B	-1.9 to -1.7	9.6	4.1	5.0	8.3	7.0	11.2							
C	-1.7 to -1.5	14.8	8.3	7.4	9.8	10.5	9.4							
D	-1.5 to -0.5	26.5	29.7	27.5	31.7	37.7	35.6							
E	-0.5 to 1.5	24.5	32.9	39.9	30.1	29.8	25.5							
F	>1.5	23.2	24.7	19.8	19.8	15.0	18.0							
Total Percentage		100.0	100.0	100.0	100.0	100.0	100.0							

(1) Adjusted for wind speed

Table 2.3.3.3-12

## AVERAGE HOURLY STABILITY CLASSES (1978 - 1980)

SOURCE: Temperature differences between 60 meter and 10 meter on the Met Tower  
(Adjusted for Wind Speed)

Month	HOUR																								Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Nov. 1978	E	E	E	E	E	E	E	E	E	E	E	E	D	D	D	D	E	E	E	E	E	E	E	E	E
Dec. 1978	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Jan. 1979	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Feb. 1979	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Mar. 1979	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Apr. 1979	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
May 1979	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
June 1979	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
July 1979	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Aug. 1979	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Sept. 1979	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Oct. 1979	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Nov. 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Dec. 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Jan. 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Feb. 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Mar. 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Apr. 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
May 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
June 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
July 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Aug. 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Sept. 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Oct. 1980	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E

## AVERAGE HOURLY STABILITY CLASSES (1980 -


SOURCE: Temperature differences between 60 meter and 10 meter on the Met Tower  
(Adjusted for Wind Speed)


Month	HOUR																								Average
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Nov. 1980	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	D
Dec. 1980	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E
Jan. 1981	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E	E
Feb. 1981	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	D
Mar. 1981	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D
Apr. 1981	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	D
May 1981																									
June 1981																									
July 1981																									
Aug. 1981																									
Sept. 1981																									
Oct. 1981																									


\* Partial data only, less than 100%  
but more than 50%

<sup>1</sup> Missing data

Key:

 Unstable Class

 Neutral

 Stable Class





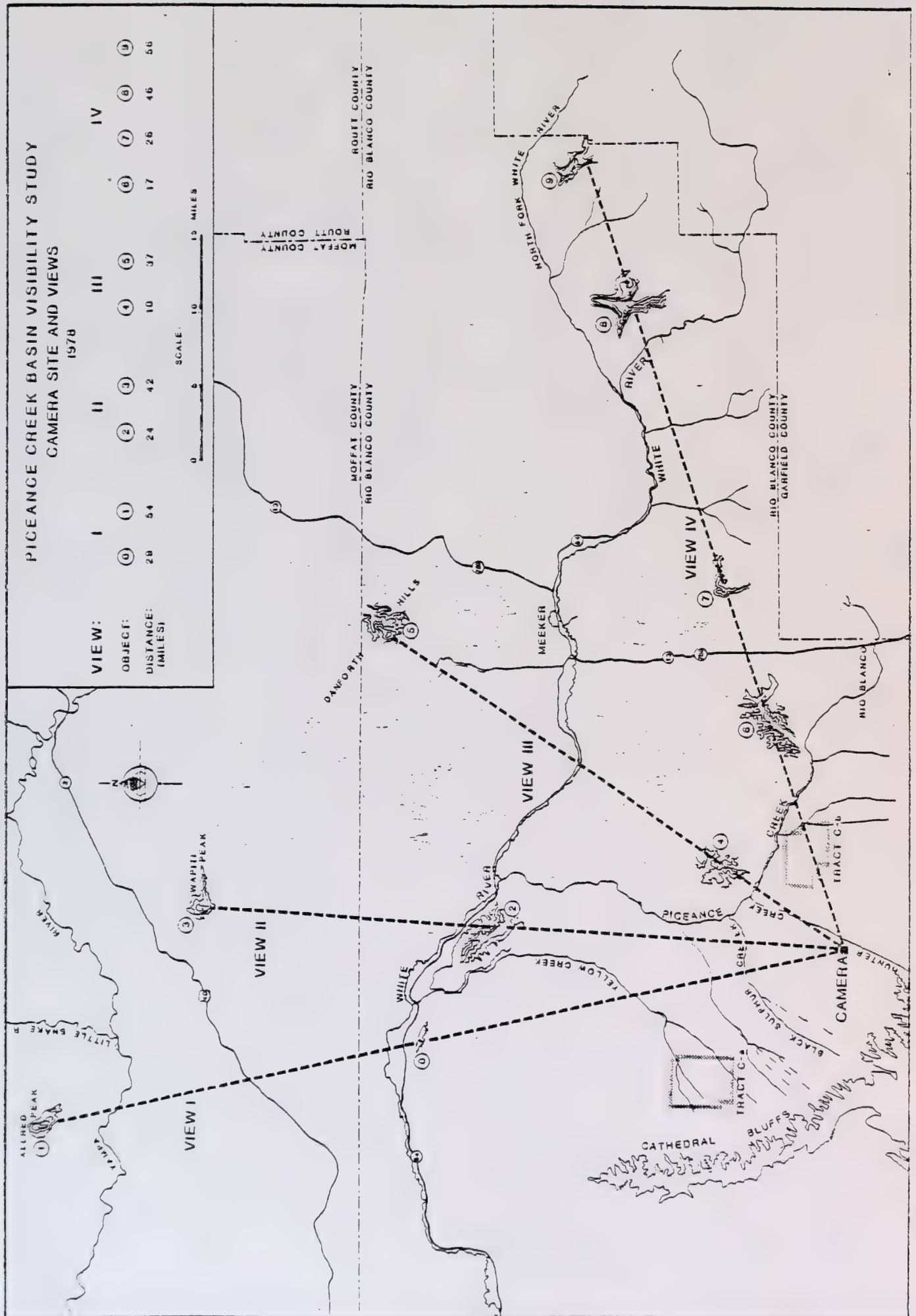


#### 2.3.4 Visibility

The visibility monitoring program has been co-sponsored by the C.B. and Rio Blanco Shale Oil Projects. There are no state or federal requirements for visibility monitoring; however, the program is required under the Federal Oil Shale Lease Environmental Stipulations.

Figure 2.3.5-1 shows the four views used to monitor visibility range. No data were collected for the visibility program this report period.

FIGURE 2.3.5-1









#### 2.3.5 Atmospheric Diffusion Studies

Atmospheric diffusion studies have been reported in the C.B. PSD application submitted to the EPA on April 13, 1981.

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### 2.3.6 Inversion Studies

Temperature inversion heights are measured by means of an AeroVironment Model 300 Acoustic Radar. The instrument was reactivated at Piceance Creek Station AB20 in November, 1977. The output of the instrument is a continuous strip chart record of reflected sound signals associated with thermal turbulence signatures; such signatures vary in character depending on whether the atmosphere is stable or unstable. The chart provided a means for determining the height in meters of temperature inversions and mixing layers above ground level.

The average hourly inversion heights by month for the period December, 1980 through April, 1981 are shown in Table 2.3.7-1.

(2)  
AVERAGE HOURLY INVERSION HEIGHT BY MONTH  
(ACOUSTIC RADAR @ STATION AB20)

Item	Month	Beginning Clock Hour (MST)																								Average
		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
I	December 1980	388	400	401	419	429	426	411	416	378	327	257						184	288	385	419	440	432	426	396	376
I	January 1981	336	343	351	354	356	352	352	341	306	300	205						176	215	302	339	346	348	329	346	309
I	February 1981	367	355	359	358	354	356	361	339	325	278	229						149	272	348	379	383	382	364	330	
I	March, 1981	330	325	329	325	328	329	308	293	238	193								162	266	319	323	322	311	291	
I	April, 1981	335	344	351	344	361	374	359	289	158									107	206	297	328	312	318	304	







#### 2.3.7 Tethersonde Soundings

No additional studies were conducted during this time period.

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#### 2.3.8 Air Quality Assurance

A revision of the air quality assurance program is being prepared as required in the Development Monitoring Plan.

The quality assurance procedures will define requirements for selection, installation, maintenance, calibration, and auditing in accordance with appropriate PSD regulations.

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#### 2.3.9 Data Reports

This section includes five monthly data reports containing data for this reporting period, required by the Development Monitoring Plan.

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AIR MONITORING REPORT  
FOR  
PROTOTYPE OIL SHALE LEASE TRACT C-B

DECEMBER 1980

SUBMITTED  
JAN. 16, 1981



PREPARED BY :  
OCCIDENTAL OIL SHALE, INC. OPERATOR  
P.O. BOX 2687  
GRAND JUNCTION, COLORADO 81501

## LIST OF TABLES

### SECTION I - AIR QUALITY & METEOROLOGICAL DATA

	<u>Page</u>
DIURNAL VARIATION OF GASEOUS AND PARTICULATE MATTER	
Nitric Oxide (NO) at Station AB20 . . . . .	II-122
Nitric Oxide (NO) at Station AB23 . . . . .	II-123
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB20 . . . . .	II-124
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB23 . . . . .	II-125
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB20 . . . . .	II-126
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB23 . . . . .	II-127
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-128
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-129
Carbon Monoxide (CO) at Station AB20 . . . . .	II-130
Carbon Monoxide (CO) at Station AB23 . . . . .	II-131
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 . . . . .	II-132
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 . . . . .	II-133
Hydrogen Sulfide (H <sub>2</sub> S) at Station AB23 . . . . .	II-134
Particulates Daily Average at Stations AB20, AB23, AD56 . . .	II-135
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS	
Wind Speed at Station AB20 . . . . .	II-136
Wind Speed at Station AA23 - 10 Meter Level . . . . .	II-137
Wind Speed at Station AA23 - 30 Meter Level . . . . .	II-138
Wind Speed at Station AA23 - 60 Meter Level . . . . .	II-139
Wind Speed at Station AD42 . . . . .	II-140
Wind Speed at Station AD56 . . . . .	II-141
Wind Direction at Station AB20 . . . . .	II-142
Wind Direction at Station AA23 - 10 Meter Level . . . . .	II-143
Wind Direction at Station AA23 - 30 Meter Level . . . . .	II-144
Wind Direction at Station AA23 - 60 Meter Level . . . . .	II-145
Wind Direction at Station AD42 . . . . .	II-146
Wind Direction at Station AD56 . . . . .	II-147

# LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS (Contd)	
Wind Direction and Vector Average at Station AB20 . . . . .	II-148
Wind Direction and Vector Average at Station AA23 -	
10 Meter Level . . . . .	II-149
Wind Direction and Vector Average at Station AA23 -	
30 Meter Level . . . . .	II-150
Wind Direction and Vector Average at Station AA23 -	
60 Meter Level . . . . .	II-151
Sigma Horizontal Wind Direction at Station AB20 -	
10 Meter Level . . . . .	II-152
Sigma Horizontal Wind Direction at Station AA23 -	
10 Meter Level . . . . .	II-153
Sigma Horizontal Wind Direction at Station AA23 -	
30 Meter Level . . . . .	II-154
Sigma Horizontal Wind Direction at Station AA23 -	
60 Meter Level . . . . .	II-155
Ambient Air Temperature at Station AB20 . . . . .	II-156
Ambient Air Temperature at Station AA23 -	
10 Meter Level . . . . .	II-157
Ambient Air Temperature at Station AA23 -	
30 Meter Level . . . . .	II-158
Ambient Air Temperature at Station AA23 -	
60 Meter Level . . . . .	II-159
Ambient Air Temperature at Station AD42 . . . . .	II-160
Ambient Air Temperature at Station AD56 . . . . .	II-161
Delta Temperature (60m - 10m) at Station AA23 . . . . .	II-162
Relative Humidity at Station AB23 - 3 Meter Level . . . . .	II-163
Solar Radiation at Station AB23 . . . . .	II-164
Barometric Pressure at Station AB23 . . . . .	II-165
Precipitation at Station AB20 . . . . .	II-166
Precipitation at Station AB23 . . . . .	II-167
Evaporation at Station AB23 . . . . .	II-168



# LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS (Contd)	
Inversion Height at Station AC20 . . . . .	II-169
Stability Class at Station AC20 - 50 Meter Level . . . . .	II-170
Stability Class at Station AC20 - 200 Meter Level . . . . .	II-171
Pasquill-Gifford Stability Class using DT/DZ - (60m - 10m) at Station AA23 . . . . .	II-172
MONTHLY SUMMARY REPORT: NO. OF 1 - HOUR SAMPLES OF GASEOUS PARAMETERS BY CONCENTRATION AND BY WIND DIRECTION, 10 METER LEVEL	
Nitric Oxide (NO) at Station AB20 . . . . .	II-173
Nitric Oxide (NO) at Station AB23 . . . . .	II-174
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB20 . . . . .	II-175
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB23 . . . . .	II-176
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB20 . . . . .	II-177
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB23 . . . . .	II-178
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-179
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-180
Carbon Monoxide (CO) at Station AB20 . . . . .	II-181
Carbon Monoxide (CO) at Station AB23 . . . . .	II-182
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 . . . . .	II-183
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 . . . . .	II-184
Hydrogen Sulfide (H <sub>2</sub> S) at Station AB23 . . . . .	II-185
MONTHLY SUMMARY REPORT: FREQUENCY TABLE OF WIND SPEED BY DIRECTION	
Station AB20 . . . . .	II-186
Station AA23 - 10 Meter Level . . . . .	II-187
Station AA23 - 30 Meter Level . . . . .	II-188
Station AA23 - 60 Meter Level . . . . .	II-189
Station AD42 . . . . .	II-190
Station AD56 . . . . .	II-191
MONTHLY SUMMARY REPORT: FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES	
Particulate at Station AB20 . . . . .	II-192
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-192

# LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
MONTHLY SUMMARY REPORT: FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES (Contd)	
Carbon Monoxide (CO) at Station AB20 - 1 Hour . . . . .	II-192
Carbon Monoxide (CO) at Station AB20 - 8 Hour . . . . .	II-192
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 - 3 Hour . . . . .	II-192
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 - 24 Hour . . . . .	II-192
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 - 3 Hour . . . . .	II-193
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 - 24 Hour . . . . .	II-193
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-193
Particulate at Station AB23 . . . . .	II-193
Carbon Monoxide (CO) at Station AB23 - 1 Hour . . . . .	II-193
Carbon Monoxide (CO) at Station AB23 - 8 Hour . . . . .	II-193
Particulate at Station AD56 . . . . .	II-194
MONTHLY SUMMARY REPORT: INSTRUMENT EFFICIENCY	
Station AB20 . . . . .	II-195
Station AB23 . . . . .	II-197
Station AD42 . . . . .	II-200
Station AD56 . . . . .	II-201

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

NITRIC OXIDE  
(UG/M3)

		HOUR (LOCAL STANDARD TIME)																								AVE	PEAK
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
AV		2	2	2	2	2	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
PK		4	4	4	4	4	4	4	4	7	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

NITRIC OXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



OXIDES OF NITROGEN  
(UG/M3)

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	6	4	4	4	4	4	4	11	6	4	4	4	2	2	2	2	4	4	6	4	4	4	4	4	4
2	4	4	4	4	4	4	4	4	6	4	8	6	6	4	4	6	8	6	4	4	4	4	4	4	4
3	4	4	4	4	4	4	4	9	8	6	9	8	6	6	6	4	9	8	4	4	4	4	4	4	4
4	4	2	4	4	4	4	4	4	4	6	6	6	4	4	4	4	4	4	6	2	4	4	4	6	4
5	6	4	4	4	4	4	6	15	8	6	4	4	4	4	4	4	4	6	4	4	4	4	4	6	5
6	9	6	4	4	4	4	6	6	4	8	6	4	4	4	4	4	6	4	4	4	4	4	4	4	5
7	6	4	4	4	4	4	4	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5
8	6	6	4	4	4	4	4	6	6	6	8	8	8	8	8	4	9	9	6	4	4	4	6	6	4
9	6	6	4	4	4	4	6	9	6	6	6	4	4	4	6	4	8	9	6	6	6	6	6	6	6
10	6	4	4	4	4	4	4	6	6	6	4	4	6	6	6	4	6	8	6	6	6	4	4	6	5
11	4	4	4	4	4	4	4	6	6	6	4	4	4	4	4	4	13	11	9	6	6	6	6	6	5
12	6	6	4	4	4	4	8	15	9	6	6	6	6	6	6	6	11	15	13	9	8	8	6	6	5
13	11	8	8	6	6	8	6	6	6	8	8	9	11	9	9	8	6	9	11	9	9	8	8	8	7
14	9	6	4	6	6	8	8	8	6	9	9	11	6	4	6	4	6	9	8	8	8	6	6	6	7
15	8	6	4	6	6	8	6	11	8	9	9	11	6	4	4	4	8	15	8	8	8	6	6	6	7
16	8	6	4	4	4	4	6	9	8	11	8	6	6	6	6	4	17	11	8	6	6	6	6	6	7
17	8	4	4	4	4	4	4	6	6	8	8	6	6	6	8	6	9	4	6	6	6	6	4	6	5
18	6	6	6	6	6	6	6	8	8	9	8	9	6	8	8	8	13	15	9	8	8	8	6	8	8
19	8	6	6	6	6	6	8	21	21	13	9	9	8	8	8	8	13	15	17	13	9	8	8	11	10
20	9	8	8	6	6	6	8	13	19	13	9	9	8	8	8	8	8	9	9	9	8	6	6	8	9
21	8	6	6	6	6	6	8	8	8	8	8	8	8	6	8	9	8	8	8	8	8	6	6	9	7
22	6	6	6	6	6	6	8	17	13	17	11	11	9	9	9	11	13	11	9	11	9	8	6	9	13
23	8	8	6	6	6	6	6	6	8	8	6	6	6	4	4	6	8	9	11	8	6	6	6	6	8
24	6	6	6	6	6	6	6	9	6	8	6	9	8	6	6	4	6	6	6	6	6	4	6	6	6
25	6	6	6	6	6	6	6	6	6	6	8	8	8	6	6	6	8	6	6	6	6	6	6	6	8
26	6	6	4	6	6	6	6	6	6	6	6	6	4	4	4	4	6	8	8	6	6	6	6	6	5
27	6	6	4	6	6	4	6	6	6	6	6	6	6	6	6	4	8	8	6	6	4	4	4	4	5
28	9	6	6	6	6	6	8	11	8	8	8	8	6	6	6	4	6	6	8	6	6	6	6	6	6
29	6	4	4	4	4	4	4	4	6	6	6	11	6	6	6	4	8	9	8	6	6	6	6	6	7
30	6	4	4	4	4	4	4	8	6	6	6	6	6	6	4	4	8	8	6	6	6	6	6	6	5
31	8	6	6	6	6	4	6	9	9	9	8	6	6	4	4	4	8	8	8	6	6	6	6	9	6
AV	7	5	5	5	5	5	5	9	8	7	7	7	6	5	5	5	8	8	7	6	6	5	5	6	6
PK	11	8	8	8	6	8	8	21	21	17	11	11	11	9	9	11	17	15	17	13	9	8	9	11	21

OXIDES OF NITROGEN  
(UG/M3)

CB-TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	17	9	28	51	26	30	11	8	8	4	11	4	6	4	2	2	2	2	2	4	6	8	6	6	2	8
10	4	4	4	4	6	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	4	4	4	10	51
11	4	4	4	4	4	4	4	4	4	4	4	2	6	2	2	2	2	2	2	2	2	4	4	4	3	6
12	6	6	4	4	8	6	8	8	8	6	0	11	0	0	0	8	2	2	2	2	4	4	4	4	3	8
13	6	13	38	28	43	32	21	13	9	11	11	11	11	9	11	9	8	8	6	6	6	6	6	30	5	30
14	11	19	13	9	9	6	17	19	8	6	6	38	8	24	2	2	6	4	2	2	4	6	4	11	14	43
15	8	19	6	4	8	15	13	4	4	4	0	4	4	0	2	0	2	2	2	2	4	4	4	4	9	38
16	2	6	17	34	9	2	6	4	4	2	2	0	0	0	0	0	2	0	0	0	0	2	2	2	4	19
17	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18	0	0	2	2	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
19	2	0	2	2	2	2	2	2	2	6	28	4	0	9	2	2	2	4	4	4	4	2	4	4	4	28
20	6	13	4	2	4	4	4	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	0	3	13
21	0	0	2	2	4	4	4	4	4	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	2
22	0	0	0	0	0	0	0	0	0	0	4	0	2	2	2	2	2	2	2	2	2	2	2	2	1	2
23	4	4	2	2	2	6	2	2	4	4	4	4	2	2	0	0	0	0	0	0	2	2	4	4	3	6
24	4	4	4	4	4	4	4	4	6	4	2	0	0	0	0	0	0	0	0	2	2	2	4	4	2	6
25	0	0	0	0	0	0	4	4	6	4	2	0	2	0	0	0	0	2	2	6	4	4	4	4	2	6
26	2	2	4	2	2	4	4	2	32	0	23	9	6	2	4	2	4	2	2	2	2	4	4	4	5	32
27	6	2	4	6	4	4	4	4	6	8	4	2	2	2	2	2	2	2	2	2	2	4	4	2	3	8
28	4	4	4	4	4	4	8	11	11	13	9	9	9	6	8	8	9	6	6	6	6	6	6	8	7	13
29	8	8	8	8	9	8	9	9	2	0	4	9	13	13	2	9	4	0	2	2	4	2	4	4	6	13
30	4	6	6	4	6	6	6	4	4	2	0	0	0	0	0	0	0	0	0	2	11	19	13	23	5	23
31	19	17	11	8	6	6	6	6	4	2	2	19	30	9	0	0	0	0	0	2	2	9	26	47	10	47
AV	4	5	5	6	5	5	4	4	4	3	4	4	3	3	2	2	2	1	1	2	2	3	3	5	3	
PK	19	19	38	51	43	32	21	19	32	13	28	38	30	24	11	9	9	8	6	6	11	19	26	47		51

NITROGEN DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE	PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	4	2	2	2	2	2	2	8	2	0	2	4	0	0	0	0	2	2	4	2	2	2	2	2	2	8
2	2	2	2	2	2	2	2	2	4	2	6	4	4	2	2	4	6	4	2	2	2	2	2	2	3	6
3	2	2	2	2	2	2	2	2	4	2	6	4	4	2	2	2	8	4	2	2	2	2	2	2	3	8
4	4	0	2	2	2	2	4	2	4	2	4	4	2	2	2	2	2	2	4	0	2	2	4	4	2	4
5	6	4	2	2	2	2	4	4	2	4	2	2	2	2	2	2	4	2	2	2	2	2	2	4	3	9
6	4	4	2	2	2	2	4	4	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	4	3	6
7	4	4	2	2	2	2	2	4	4	2	2	4	4	4	4	2	6	6	4	4	4	2	4	4	2	4
8	4	4	2	2	2	2	4	4	4	2	2	2	4	4	4	2	6	8	4	4	4	2	4	4	3	4
9	4	4	2	2	2	2	2	4	4	2	2	2	4	4	4	2	4	6	6	4	4	2	4	4	3	6
10	4	4	2	2	2	2	2	4	4	2	2	2	4	4	4	0	4	4	6	4	4	2	4	2	3	6
11	0	2	2	2	2	2	2	4	2	2	2	2	2	0	0	0	8	8	11	6	6	4	6	4	2	8
12	2	4	4	4	4	4	4	4	6	4	6	6	8	6	6	4	6	9	9	4	4	6	4	4	4	9
13	8	6	4	4	4	4	4	4	2	4	6	6	2	2	2	4	2	6	4	4	4	4	4	4	5	6
14	6	4	4	4	4	4	4	4	4	6	4	6	2	2	0	4	4	11	4	4	4	2	2	6	3	6
15	4	2	2	2	2	2	4	6	4	4	4	2	2	2	0	2	4	11	4	4	4	2	2	2	3	6
16	4	2	2	2	2	2	4	4	4	4	4	2	2	2	0	4	11	8	2	2	2	4	2	2	3	6
17	4	2	2	2	2	2	4	4	4	4	4	2	2	2	0	4	6	11	6	4	4	4	4	2	3	6
18	4	2	2	2	2	2	4	4	4	4	4	2	2	2	0	4	6	11	6	4	4	4	4	2	3	6
19	2	2	2	2	2	2	4	4	4	4	4	2	2	2	0	4	6	11	6	4	4	4	4	2	3	6
20	6	4	4	4	4	4	4	4	9	6	4	4	4	4	4	4	4	11	6	4	4	4	4	6	5	6
21	4	2	2	2	2	2	4	4	6	4	4	4	4	4	4	6	4	6	4	4	4	2	2	6	3	6
22	4	2	2	2	2	2	4	4	6	4	4	4	4	4	4	6	4	6	4	4	4	2	2	6	3	6
23	4	4	4	4	4	4	4	11	8	4	4	4	4	4	4	2	4	6	4	4	4	2	2	6	3	6
24	4	4	4	4	4	4	4	11	6	4	4	4	4	4	4	4	4	6	4	4	4	2	2	6	3	6
25	2	2	2	2	2	2	4	2	4	4	4	4	4	4	4	6	4	6	4	4	4	2	2	6	3	6
26	2	2	2	2	2	2	4	2	4	4	4	4	4	4	4	6	4	6	4	4	4	2	2	6	3	6
27	2	2	2	2	2	2	4	2	4	4	4	4	4	4	4	6	4	6	4	4	4	2	2	6	3	6
28	2	2	2	2	2	2	4	2	4	4	4	4	4	4	4	6	4	6	4	4	4	2	2	6	3	6
29	4	2	2	2	2	2	4	2	4	4	4	4	4	4	4	6	4	6	4	4	4	2	2	6	3	6
30	2	2	2	2	2	2	4	2	4	4	4	4	4	4	4	6	4	6	4	4	4	2	2	6	3	6
31	4	2	2	2	2	2	4	2	4	4	4	4	4	4	4	6	4	6	4	4	4	2	2	6	3	6
AV	3	2	2	2	2	2	3	5	4	3	3	3	3	2	2	2	5	5	4	3	3	2	2	3	3	11
PK	8	4	6	6	4	6	4	11	9	8	8	6	8	6	6	8	11	11	11	9	6	6	6	6	3	11

NITROGEN DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	17	9	28	45	26	30	11	8	8	4	11	4	6	4	2	2	2	2	2	2	6	8	6	6	2	8
10	4	4	4	4	6	4	4	4	4	4	4	4	2	4	6	4	2	2	2	2	2	4	4	4	10	45
11	4	4	4	4	4	4	4	4	4	4	4	0	0	0	2	8	2	2	2	2	2	4	4	4	3	8
12	6	6	4	4	8	6	8	8	8	6	9	11	9	0	0	2	2	2	2	2	4	4	4	4	3	6
13	13	13	38	28	43	32	21	13	9	9	9	9	9	17	11	9	8	8	6	6	6	6	6	11	5	30
14	11	19	13	9	9	15	17	19	4	6	6	21	8	9	4	2	6	4	2	2	4	4	4	4	14	43
15	8	19	6	34	8	15	13	4	4	4	0	4	4	2	0	0	2	2	0	0	0	2	2	2	8	21
16	2	6	17	0	9	2	6	4	4	2	2	0	0	0	0	0	0	0	0	0	0	2	2	2	4	34
17	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
18	0	0	2	2	2	2	2	2	2	2	17	4	0	9	2	2	2	4	4	4	4	2	2	4	0	2
19	2	0	2	2	2	4	2	2	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	4	3	17
20	6	13	4	2	4	4	4	4	4	4	4	2	4	0	0	0	0	2	2	0	2	2	2	0	1	4
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
22	4	4	2	2	4	6	2	2	4	4	2	4	2	2	2	2	2	2	2	2	2	4	4	2	1	2
23	4	4	4	4	4	4	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	2	4	3	6
24	4	4	4	4	4	4	4	4	6	4	2	0	2	0	0	0	0	0	0	0	2	2	2	4	2	6
25	0	0	0	0	0	0	4	4	6	4	2	0	2	0	0	0	0	2	2	6	4	2	2	4	2	6
26	2	2	4	2	4	4	4	4	6	0	17	9	6	2	4	2	4	4	2	2	2	4	2	4	4	17
27	6	4	4	6	4	4	4	4	11	11	4	9	9	6	8	8	9	6	6	4	6	6	4	4	3	8
28	4	8	4	4	4	4	8	9	11	0	9	9	13	6	2	9	4	0	2	6	4	2	6	8	7	11
29	8	8	8	8	9	8	9	4	2	2	4	9	13	13	2	9	4	0	2	2	11	19	4	4	6	13
30	4	6	6	4	6	6	6	4	4	2	0	0	0	0	0	0	0	0	0	2	11	19	13	23	5	23
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	3	4	5	5	5	5	4	4	3	3	3	3	2	2	2	2	2	1	2	2	2	2	2	4	3	45
PK	17	19	38	45	43	32	21	19	11	11	17	21	13	17	11	9	9	8	6	6	11	19	13	30	3	45



OZONE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	27	31	29	29	20	14	20	10	20	29	33	37	39	39	39	41	33	24	10	8	8	10	14	18	24	41
2	16	14	16	24	41	41	41	41	37	39	37	39	41	41	43	41	35	35	39	39	37	37	35	33	35	43
3	27	24	29	24	22	20	27	16	18	31	27	27	31	33	37	37	29	24	25	27	31	27	27	29	27	37
4	29	31	27	29	27	27	27	27	27	29	31	31	33	33	33	29	29	33	27	29	22	14	24	14	26	33
5	2	4	6	12	2	8	2	0	0	12	25	29	27	27	41	31	27	24	25	16	12	10	4	0	14	41
6	0	0	0	0	0	0	0	2	14	18	29	33	37	39	37	37	33	25	10	4	2	2	0	0	13	39
7	0	0	0	0	0	0	0	0	0	10	12	16	20	22	24	24	25	31	25	29	29	29	27	24	14	31
8	22	22	24	24	25	25	25	24	22	24	24	25	27	27	31	37	33	22	16	12	8	12	10	12	22	37
9	12	12	12	14	16	16	12	6	4	24	27	31	35	39	39	37	24	16	24	18	18	18	16	16	20	39
10	16	16	18	20	20	20	20	20	22	25	35	31	33	39	39	41	33	27	27	29	31	31	31	31	27	41
11	31	31	33	33	33	31	35	31	31	35	43	49	49	49	49	43	20	18	12	18	20	22	20	22	32	49
12	6	10	18	18	16	14	0	2	14	25	25	39	39	37	33	31	22	4	6	6	10	12	16	12	17	39
13	4	8	12	12	12	12	14	14	18	12	25	33	31	31	31	31	20	18	12	12	10	12	12	12	17	33
14	6	10	10	10	12	8	14	6	14	16	22	24	31	35	39	39	27	16	12	12	14	14	18	18	17	39
15	6	10	16	12	0	6	14	12	20	16	24	27	37	41	39	35	24	10	10	8	6	8	6	6	16	41
16	2	2	4	6	6	2	0	2	6	0	12	20	31	35	37	25	8	10	10	10	10	14	12	8	11	37
17	8	10	8	6	14	12	16	14	16	10	20	33	33	49	71	71	59	57	61	57	55	55	57	53	35	71
18	51	53	55	55	55	53	49	51	53	55	69	73	74	73	74	73	55	45	51	53	53	49	51	51	57	74
19	47	45	47	47	37	33	29	24	31	39	47	53	57	57	16	20	6	0	0	0	0	0	0	0	25	57
20	0	0	0	0	0	0	0	0	0	0	16	25	45	43	41	35	25	18	14	10	12	12	10	10	13	45
21	10	14	14	14	14	0	6	16	16	25	37	41	41	45	43	43	47	37	31	35	41	35	35	41	28	47
22	43	41	39	35	35	37	33	27	25	35	33	35	35	33	35	33	29	29	25	22	16	14	8	4	29	43
23	24	12	12	4	4	14	31	18	12	12	22	33	35	39	39	37	24	14	10	12	14	14	12	16	19	39
24	12	12	14	16	16	18	20	16	22	27	37	39	39	37	39	37	31	33	31	27	29	33	33	33	27	39
25	33	33	33	29	24	22	22	18	24	27	31	33	33	33	33	33	27	22	14	16	20	16	14	12	25	33
26	10	10	6	8	8	6	8	4	10	10	18	22	25	29	29	25	16	12	6	2	4	8	10	4	12	29
27	4	8	10	12	12	12	12	8	12	14	18	14	14	27	29	29	24	16	14	14	12	12	10	10	14	29
28	6	4	4	4	4	0	0	0	0	10	20	24	27	29	27	29	27	20	6	2	0	0	0	0	10	29
29	0	0	0	0	0	0	0	0	0	6	22	35	41	43	65	80	65	49	49	51	49	53	53	55	30	80
30	59	57	55	55	57	57	57	53	59	61	73	78	82	82	80	76	61	53	55	57	55	55	57	53	62	82
31	49	53	51	43	41	45	49	47	47	29	31	41	41	45	47	47	39	27	18	18	16	14	10	8	36	53
AV	18	19	19	19	18	18	18	16	19	23	30	35	38	39	41	40	31	25	22	21	21	21	20	19	25	82
PK	59	57	55	55	57	57	57	53	59	61	73	78	82	82	80	80	65	57	61	57	55	55	57	55		

OZONE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	67	71	73	71	67	67	63	59	55	57	61	78	76	76	78	80	78	67	69	67	65	63	73	74	69	80
2	76	74	76	78	78	78	78	78	80	78	80	78	78	80	84	82	82	78	78	74	73	74	74	76	78	84
3	74	67	67	65	63	61	63	61	65	69	74	74	76	73	76	78	73	69	67	65	65	67	63	65	68	78
4	69	69	67	67	69	67	69	69	69	71	73	73	73	73	71	69	69	69	69	69	69	63	65	59	68	73
5	57	57	61	57	53	57	57	63	59	63	65	65	67	61	67	69	67	63	57	53	55	57	55	55	60	69
6	45	35	45	51	55	55	57	67	63	63	73	73	76	76	76	76	76	71	69	67	63	61	61	59	63	76
7	57	53	55	43	39	35	43	49	43	41	43	47	53	57	53	61	59	67	67	67	67	67	67	65	54	67
8	59	61	59	61	61	61	61	59	59	61	61	63	63	67	71	73	78	67	65	69	67	67	69	63	64	78
9	53	63	41	20	31	27	43	43	51	67	63	71	76	78	78	78	78	65	69	69	69	71	74	73	60	78
10	78	78	78	74	73	73	69	69	67	69	76	80	80	84	82	80	76	73	71	71	69	71	71	73	74	84
11	74	74	74	74	74	74	76	76	73	73	82	82	82	84	82	76	82	73	71	76	74	76	76	76	77	84
12	71	67	74	76	71	74	65	69	69	69	78	69	73	78	74	73	71	65	61	65	67	67	63	35	68	78
13	63	55	24	37	16	33	45	57	61	55	61	65	69	71	73	73	73	69	65	67	71	73	71	63	58	73
14	65	55	59	69	67	69	53	51	63	63	61	43	74	63	78	78	76	74	71	71	71	71	74	74	66	78
15	69	57	74	71	67	59	61	74	67	69	73	73	71	74	74	74	73	67	65	63	59	63	65	63	68	74
16	63	55	37	16	51	61	55	55	57	51	57	61	67	71	71	71	67	63	61	61	59	63	59	61	58	71
17	63	63	65	65	65	63	63	63	59	55	69	71	69	69	71	69	69	69	67	67	69	69	69	69	66	71
18	67	65	63	63	63	61	61	57	57	63	69	69	71	73	73	71	67	65	67	67	67	76	78	74	67	78
19	71	65	67	61	51	47	47	43	39	35	25	47	55	47	47	57	59	57	51	51	53	55	57	57	52	71
20	55	51	73	78	76	74	76	78	73	65	80	86	90	88	86	86	84	78	76	78	82	84	84	86	78	90
21	80	80	82	82	80	78	78	76	76	78	84	84	86	88	90	90	90	92	96	94	92	92	92	88	86	96
22	86	84	82	80	78	76	74	74	74	76	78	78	78	80	78	78	76	76	78	76	78	73	69	69	77	86
23	59	55	59	55	59	63	71	63	57	63	67	74	74	74	74	73	65	65	63	59	59	61	65	57	64	74
24	65	67	65	65	65	61	67	63	63	71	74	76	74	73	73	73	74	74	73	74	73	71	71	69	70	76
25	69	67	65	63	61	59	57	57	57	59	59	61	61	61	61	59	55	55	51	49	47	47	45	47	57	69
26	45	47	45	45	45	47	43	39	49	59	49	61	63	69	65	63	55	59	59	57	63	65	61	65	55	69
27	61	61	59	61	61	61	63	63	59	61	69	69	69	69	74	78	76	78	76	76	73	69	67	69	67	78
28	67	71	73	71	59	59	55	51	55	47	53	61	67	65	63	65	59	61	57	53	55	57	53	51	59	73
29	57	59	59	57	55	53	55	51	49	61	71	73	71	76	39	78	80	76	73	74	74	71	71	76	65	80
30	74	74	76	78	78	78	78	76	71	74	84	84	88	86	84	82	76	73	67	73	61	51	63	49	74	88
31	51	53	67	69	67	69	71	73	71	67	67	61	55	69	2	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	60	73
AV	65	63	63	62	61	61	62	62	61	63	67	69	72	73	70	74	72	69	67	67	67	67	67	67	65	66
PK	86	84	82	82	80	78	78	78	80	78	84	86	90	88	90	90	90	92	96	94	92	92	92	92	88	96

CARBON MONOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE	PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

CARBON MONOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	0	0	0	0	0	0	0	0	0	(RF)	(RF)	(RF)	(RF)	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100	100	0	0	0	0	100
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0	100
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100	0	0	0	0	0	0	0	0	0	100
13	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0	0	100
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	200	200	200	200	100	100	100	100	100	100
18	200	200	200	200	200	200	200	200	200	200	200	200	200	100	100	200	200	200	200	200	100	100	100	100	100	200
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	200	200	200	200	200	200	200	200	200	200	200	200	200	100	100	200	200	200	200	300	300	300	200	200	0	300



SULFUR DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	3	3	3	5	3	3	5	5	5	5	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	5
2	3	3	3	3	3	3	3	3	3	3	5	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
3	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
4	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
5	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
6	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
7	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
8	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
9	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
10	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
11	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
12	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
13	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
14	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
15	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
16	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
17	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
18	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
19	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
20	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
21	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
22	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
23	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
24	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
25	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
26	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
27	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
28	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
29	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
30	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
31	3	3	3	3	3	3	3	3	3	3	3	5	5	3	3	3	3	3	3	3	3	3	3	3	3	5
AV	5	4	4	4	4	4	5	5	5	6	5	5	5	5	4	4	5	4	5	5	5	4	4	5	5	16
PK	8	5	5	5	5	5	5	16	16	13	8	8	8	8	5	5	8	5	8	5	5	5	5	8	8	8

SULFUR DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(IM)	(IM)	(IM)	(IM)	(IM)																					
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	3
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	10	10	10	8	10	10	10	8	10	10	10	10	10	10	10	8	8	8	8	10	10	8	10	10	6	10
23	8	8	10	8	8	8	8	8	8	10	10	10	8	8	8	8	8	8	10	10	10	10	10	10	10	10
24	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
25	13	13	13	13	13	13	13	13	13	13	13	13	13	10	10	10	10	10	10	10	10	10	10	10	10	10
26	13	13	10	10	10	13	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2
PK	13	13	13	13	13	13	13	13	13	13	13	13	13	10	10	10	10	10	10	10	10	10	10	10	10	13

HYDROGEN SULFIDE  
(UG/M3)

CH-TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

		HOUR (LOCAL STANDARD TIME)																									
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
PK		0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	17

PARTICULATE DATA  
UG/M3

CH-TRACT  
DEC 1980  
OCCIDENTAL OIL SHALE, INC

DAY	AB20	STATION AB23	AD56
3	9.2	58.4	6.5
6	4.1	4.1	1.5
9	4.8	0.1	0.5
12	7.5	6.4	1.8
15	2.3	2.0	2.8
18	3.2	4.6	4.2
21	2.9	3.5	5.2
24	3.8	2.0	2.0
27	2.4	3.3	5.0
30	4.8	2.2	3.3
PK	9.2	58.4	6.5
AV	4.5	8.7	3.3
GM	4.1	3.1	2.7



WIND SPEED @10M  
METERS/SEC

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	1	1	1	0	0	0	2	2	3	4	4	4	5	4	5	4	2	0	1	1	1	1	3	4	2	5
2	2	1	1	1	1	1	1	3	0	2	6	4	5	1	4	1	1	1	3	4	3	4	3	2	2	4
3	0	2	3	3	1	1	1	0	0	4	5	4	6	4	4	4	1	0	2	3	0	1	1	0	4	6
4	4	1	3	0	1	1	0	1	1	2	1	3	3	3	3	3	4	1	1	1	2	1	1	0	4	6
5	1	1	0	0	0	0	0	1	0	0	1	2	3	3	3	2	0	0	0	0	1	0	0	1	4	4
6	0	0	1	1	0	2	3	0	2	1	1	2	3	4	1	2	2	2	2	1	1	2	4	1	2	4
7	3	3	3	3	2	0	3	0	0	0	2	2	4	2	2	2	1	1	1	3	0	0	2	0	2	4
8	3	3	4	3	4	1	4	4	4	3	3	2	4	3	3	3	0	1	1	4	3	3	2	1	2	4
9	3	3	4	4	5	0	4	2	4	3	1	1	1	3	2	2	1	2	1	1	2	3	2	1	2	4
10	4	1	2	2	1	1	0	1	0	4	2	1	1	0	2	2	1	1	3	0	4	3	3	2	3	4
11	1	2	2	2	1	0	0	3	4	3	3	3	3	3	4	2	1	2	4	1	2	2	1	2	3	4
12	1	1	2	2	1	2	3	4	2	1	1	2	3	3	1	1	0	1	1	0	2	2	1	1	2	4
13	1	1	1	1	1	0	0	2	3	1	1	2	3	3	2	1	0	2	1	1	2	2	1	1	2	4
14	1	1	1	1	1	2	0	1	1	2	2	2	3	3	2	1	0	1	1	2	2	3	2	1	2	4
15	0	1	1	1	1	0	2	2	2	1	1	2	3	2	1	0	1	1	1	2	2	2	2	1	2	4
16	1	1	1	1	2	3	5	4	4	3	1	2	0	2	0	1	1	0	1	2	2	3	2	1	2	4
17	3	3	2	2	0	0	0	1	2	0	0	2	2	2	2	0	0	1	2	0	1	2	2	1	2	4
18	2	2	2	1	0	0	0	0	4	0	1	1	1	3	2	1	0	1	1	2	2	2	2	1	2	4
19	2	2	1	0	0	0	0	0	1	0	1	1	2	2	2	1	0	1	1	2	1	2	1	1	2	4
20	2	2	1	1	2	0	2	4	4	3	1	2	1	2	2	1	0	1	1	2	2	2	1	1	2	4
21	2	2	1	1	2	0	0	0	1	0	1	1	2	3	2	0	1	1	1	2	1	2	0	0	2	4
22	1	1	0	2	1	2	1	2	0	2	3	0	3	4	3	2	1	1	1	2	1	2	3	1	2	4
23	1	1	2	2	1	0	5	0	0	0	0	3	4	1	2	1	0	1	1	2	1	2	1	1	2	4
24	1	1	2	2	1	4	1	2	4	3	2	1	2	3	2	1	2	1	1	2	1	2	1	1	2	4
25	1	1	2	1	1	1	2	1	1	1	1	1	2	2	2	1	1	1	1	2	1	2	1	1	2	4
26	1	1	2	2	1	2	2	1	2	1	1	1	2	2	2	2	1	1	1	2	1	2	1	1	2	4
27	3	2	4	1	4	4	3	1	2	2	3	1	2	3	2	2	1	1	2	2	1	2	3	2	2	4
28	2	2	1	1	0	0	1	0	1	1	0	0	3	1	1	1	2	1	0	1	1	1	1	2	2	4
29	2	1	1	1	1	1	1	2	3	3	1	2	0	1	1	1	0	1	1	1	2	2	1	3	2	4
30	4	5	4	3	2	4	3	0	4	0	2	1	1	3	4	4	0	1	2	1	2	1	1	0	2	4
31	1	2	1	0	0	2	2	2	1	0	0	2	3	4	4	3	1	1	1	2	2	1	1	1	2	4

AV	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	1	1	1	1	2	2	2	2	2	6
PK	4	5	5	5	5	5	5	4	4	4	6	5	6	5	5	4	4	2	2	4	4	4	4	4	4	6

WIND SPEED @ 10M  
METERS/SEC

CH-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	3	9	4	5	5	5	5	5	3	2	1	2	1	1	1	3	3	5
2	3	4	4	6	8	7	8	7	7	10	11	10	9	7	9	7	8	7	9	7	8	8	6	4	5	7
3	4	4	3	2	2	4	5	5	8	10	10	9	10	8	8	6	7	8	7	7	8	8	4	3	5	11
4	3	5	4	6	5	4	4	6	7	8	9	8	5	8	8	4	4	4	8	5	2	2	6	3	3	10
5	2	1	3	3	0	0	1	1	1	2	4	5	5	3	5	4	4	4	4	3	4	4	3	2	6	9
6	1	1	0	1	1	0	1	2	0	2	6	5	6	6	5	4	4	4	1	3	1	2	2	1	5	5
7	2	2	2	3	2	2	2	1	0	1	1	2	2	4	2	2	2	3	3	3	1	2	3	3	3	6
8	3	3	0	0	0	2	2	2	2	2	2	2	2	2	2	1	2	0	2	2	2	0	3	3	4	4
9	1	1	1	0	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	0	0	1	1	2	3
10	1	0	1	2	2	2	2	2	1	2	0	2	2	2	2	2	2	3	3	2	0	0	0	0	0	2
11	2	1	1	1	1	2	2	1	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2
12	1	0	1	0	0	2	2	0	0	1	1	1	2	1	3	0	2	1	2	2	0	1	0	0	0	3
13	1	0	0	0	0	0	0	0	0	0	1	2	3	2	2	2	1	0	2	0	0	0	1	1	1	2
14	1	1	1	1	1	0	1	0	1	1	0	1	1	1	0	1	1	2	1	0	0	0	0	1	1	2
15	0	1	0	1	1	0	1	2	1	1	1	1	1	1	0	0	0	0	1	1	1	0	0	1	1	2
16	1	1	0	0	0	0	0	0	1	0	1	1	1	1	1	0	0	0	1	1	1	0	0	1	1	2
17	2	2	2	2	2	2	2	2	2	0	2	4	4	6	3	4	3	4	1	1	0	2	2	4	1	6
18	5	3	4	4	4	4	2	1	1	1	3	3	3	3	4	3	3	1	1	1	1	1	3	3	3	6
19	1	2	1	0	0	1	1	0	0	0	1	1	1	4	1	2	2	1	1	1	0	0	1	1	1	2
20	0	1	1	1	1	2	1	0	1	1	0	3	3	4	4	3	4	4	5	5	6	7	6	5	4	7
21	1	4	4	5	6	6	5	3	5	5	2	4	5	4	4	4	4	4	1	1	1	1	1	5	3	6
22	0	0	2	1	1	3	1	0	0	0	4	2	1	2	1	1	0	3	1	0	1	2	2	3	3	2
23	2	2	2	2	2	2	3	2	1	1	1	4	4	4	4	4	4	2	1	1	0	0	1	1	1	2
24	6	5	6	5	4	3	4	3	4	3	3	4	3	3	3	3	3	2	2	1	2	7	5	7	4	7
25	6	5	6	5	4	3	4	3	4	3	3	4	3	3	3	3	2	2	0	0	2	5	7	7	3	6
26	1	1	2	2	1	2	0	0	1	0	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	2
27	2	1	2	2	2	2	2	2	1	1	2	1	3	4	4	2	0	1	1	2	1	0	0	0	1	4
28	0	0	0	0	1	1	0	0	0	0	1	1	2	2	3	2	3	1	1	1	1	2	1	1	1	3
29	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	2	1	1	1	1	2	2	4
30	2	2	2	2	2	2	1	0	1	1	3	2	2	2	0	0	1	2	2	0	0	0	1	0	1	2
31	1	1	0	1	1	0	1	0	0	0	0	2	2	2	2	2	2	1	1	0	0	0	0	0	1	2
AV	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2
PK	6	5	6	6	8	7	8	7	8	10	11	10	10	8	9	9	7	8	9	7	8	8	6	7	7	11

WIND SPEED @ 30M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	4	4	6	7	7	6	6	7	4	3	2	2	3	1	2	4	4	7
2	5	7	6	9	12	11	12	11	9	11	14	16	12	9	10	9	10	12	11	8	12	8	8	8	10	16
3	6	7	4	2	3	4	6	8	12	13	14	13	13	9	12	8	9	11	11	11	12	12	6	5	9	14
4	4	7	6	8	8	5	6	9	10	11	12	12	13	11	11	8	5	9	11	7	7	2	4	4	8	13
5	4	2	4	4	1	2	2	1	10	4	5	6	6	4	7	6	5	6	1	4	7	7	5	3	4	7
6	1	1	1	2	1	1	3	4	0	3	8	7	8	8	7	6	4	4	4	3	1	4	4	4	4	8
7	4	3	3	0	1	0	1	2	0	1	1	2	3	4	2	3	3	4	3	3	3	3	4	4	4	4
8	4	4	1	0	3	3	2	3	2	2	2	2	2	2	2	1	3	1	1	0	1	0	1	0	2	4
9	1	1	1	0	2	1	2	3	2	2	0	2	1	2	3	2	4	5	2	1	1	3	1	0	1	4
10	1	2	2	0	1	2	2	2	1	1	3	2	1	1	1	0	1	1	2	1	2	0	1	1	2	5
11	2	1	1	0	1	3	2	2	0	1	1	1	1	1	1	2	1	1	2	1	1	0	1	1	1	3
12	0	1	1	0	0	0	1	1	0	0	2	3	2	2	3	2	1	2	1	1	2	0	0	0	1	3
13	0	0	0	0	0	0	0	0	0	0	2	1	2	3	3	2	1	3	1	1	1	1	0	0	1	3
14	1	1	0	1	1	0	0	1	2	0	0	2	1	1	1	1	0	3	1	1	0	0	0	0	1	3
15	0	0	1	1	0	0	1	3	2	1	1	1	0	1	0	0	0	0	1	1	1	2	1	1	1	3
16	0	0	2	2	3	2	3	3	2	0	4	4	5	8	4	7	8	7	3	3	0	3	4	6	4	8
17	2	2	6	6	6	6	4	1	1	2	4	5	4	4	5	4	5	5	1	1	1	0	1	1	1	3
18	7	4	1	0	2	2	4	1	1	0	4	4	5	4	4	4	5	7	1	1	1	0	1	1	1	3
19	1	2	1	0	1	2	1	1	0	1	1	1	1	2	2	2	2	1	1	1	1	0	1	1	1	3
20	0	1	1	1	1	2	1	0	1	1	0	2	2	5	5	4	3	2	2	8	9	1	1	1	1	5
21	1	1	1	1	1	2	1	4	2	2	6	3	4	5	6	6	6	7	7	3	2	11	4	4	6	11
22	8	5	6	8	9	8	7	4	7	7	6	5	7	6	5	7	6	5	3	1	0	3	4	4	4	9
23	1	1	2	2	1	4	1	1	0	0	2	2	1	5	4	1	4	4	1	1	4	10	8	10	4	10
24	2	3	3	3	7	5	6	4	3	4	4	2	4	4	4	4	4	4	2	2	3	2	3	3	5	9
25	9	8	9	8	1	3	1	4	5	2	1	1	4	4	4	4	4	4	1	1	4	2	8	10	4	10
26	2	1	2	1	1	3	1	1	1	0	1	1	1	1	1	3	2	1	1	1	1	0	1	1	1	3
27	3	2	2	3	3	3	3	4	2	2	3	3	4	5	4	3	1	1	1	3	2	0	1	1	1	5
28	0	0	0	1	1	1	1	0	0	0	2	2	2	3	4	4	4	1	2	1	1	1	1	2	2	4
29	1	1	0	1	1	1	0	0	0	1	1	0	1	1	0	1	2	1	2	2	2	3	2	2	1	3
30	2	2	3	3	3	3	3	1	1	2	4	3	2	2	3	4	4	2	2	0	1	0	1	1	2	4
31	0	1	1	1	2	0	1	0	0	0	0	1	3	2	2	3	3	2	1	0	0	0	0	0	1	3
AV	3	2	3	2	3	3	3	3	3	3	4	4	4	4	4	4	4	3	3	2	2	3	3	3	3	16
PK	9	8	9	9	12	11	12	11	12	13	14	16	13	11	12	9	10	12	11	11	12	12	9	10		

WIND SPEED @ 60M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	4	3	5	6	6	6	6	6	4	2	1	2	3	2	2	4	4	6
2	6	7	7	9	11	10	11	9	10	11	13	13	11	9	10	10	11	10	12	12	9	9	9	8	10	13
3	3	4	4	3	3	5	7	8	10	13	13	14	13	9	10	8	10	12	12	9	10	9	5	4	9	14
4	4	5	8	6	8	6	6	9	8	9	11	12	13	11	10	9	6	9	11	7	4	4	9	5	8	13
5	5	2	3	3	4	3	2	2	1	2	4	5	7	4	8	6	5	6	6	4	6	6	5	4	4	8
6	4	3	3	2	2	2	2	4	1	1	8	7	8	4	8	6	4	4	5	4	3	4	4	4	4	8
7	4	3	4	4	3	3	2	3	2	2	1	2	3	4	2	2	3	2	3	3	3	3	4	4	4	8
8	3	1	1	1	1	1	2	3	2	3	2	2	2	3	2	2	3	2	0	0	1	1	1	0	2	4
9	1	1	2	2	1	1	3	2	2	2	1	2	1	2	1	1	2	1	1	1	1	0	1	1	2	4
10	1	2	2	2	2	2	3	1	2	2	2	2	2	2	3	2	3	1	3	2	2	0	1	1	2	4
11	2	2	1	0	0	1	1	1	1	1	1	1	2	2	3	2	1	2	2	2	2	0	1	1	2	5
12	2	1	1	1	1	1	1	1	0	0	2	3	3	2	3	2	1	0	1	1	1	2	1	1	1	3
13	1	1	1	1	1	1	0	0	0	1	2	3	3	3	3	2	1	0	1	1	0	1	1	1	1	3
14	1	1	1	1	0	1	1	1	2	3	2	1	1	1	1	0	0	2	2	1	1	1	1	1	1	3
15	0	1	1	1	1	1	2	3	2	3	1	1	2	1	1	0	0	0	2	2	1	1	1	1	1	3
16	1	1	1	2	3	2	3	1	1	1	3	5	4	4	4	2	3	7	2	4	1	2	1	1	1	9
17	7	5	2	7	7	2	5	2	2	3	4	4	4	7	5	4	5	3	3	2	2	3	5	7	4	7
18	1	1	2	1	2	2	1	1	0	1	1	1	1	2	2	2	1	2	4	2	4	1	1	1	1	2
19	1	1	2	1	1	2	1	1	1	1	1	3	4	4	5	4	4	3	3	2	0	1	1	1	1	5
20	1	1	2	1	2	2	1	1	1	1	1	3	4	4	4	2	4	2	3	2	2	1	1	1	1	2
21	1	1	2	1	1	2	1	1	2	2	3	4	4	4	4	5	6	7	7	8	9	11	10	7	5	11
22	8	6	5	7	9	8	8	0	7	8	5	6	7	6	5	5	6	6	4	3	2	2	6	5	6	9
23	2	3	1	4	3	3	3	4	0	2	1	2	2	1	2	1	2	3	3	2	2	9	9	2	2	5
24	2	3	4	4	7	6	7	6	5	4	4	4	4	4	4	4	4	4	4	3	3	3	4	4	4	10
25	10	9	9	8	7	6	4	4	5	4	4	4	4	4	3	3	4	4	3	3	4	4	4	4	4	10
26	3	2	2	2	1	2	1	1	1	0	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	10
27	3	2	2	3	3	3	3	3	2	3	3	4	4	4	5	4	2	1	1	3	3	3	4	5	5	10
28	1	1	1	0	1	1	1	1	0	1	2	2	2	3	3	3	2	3	2	2	2	2	2	2	2	10
29	1	1	1	0	0	1	1	0	0	0	1	2	1	1	0	2	4	3	1	2	1	1	2	2	2	10
30	2	4	4	3	2	3	3	2	2	4	3	2	3	2	4	4	3	1	2	1	1	1	2	2	2	4
31	1	1	1	1	1	1	1	1	(MT)	1	0	1	2	3	2	3	3	3	1	0	0	1	1	1	1	3
AV	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	14
PK	10	9	9	9	11	10	11	9	10	13	13	14	13	11	10	10	11	12	12	9	10	11	10	10	10	14



C-B TRACT  
MRI AD42  
DEC 1980

DATA NOT AVAILABLE AT REPORT TIME

WIND SPEED @10M

WIND SPLIED @10M

C-B TRACT  
MRI AD56  
DEC 1980

DATA NOT AVAILABLE AT REPORT TIME

WIND DIRECTION #10M  
DEGREES

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	175	225	199	202	17	63	297	310	286	284	317	297	288	291	298	300	292	61	85	106	127	126	139	137	274
2	133	113	104	110	112	107	104	79	119	131	161	191	189	144	136	150	107	104	80	79	66	66	74	78	113
3	90	110	120	117	114	125	145	126	96	150	174	166	186	181	171	157	105	41	99	116	76	104	75	90	122
4	72	63	110	110	109	114	122	123	103	173	191	180	183	188	202	192	233	226	185	256	104	120	172	180	154
5	109	115	139	120	114	104	99	107	128	129	201	182	162	144	182	156	129	123	304	122	117	130	90	321	131
6	90	114	111	100	90	333	112	114	109	90	268	203	228	206	228	223	204	270	22	112	112	109	114	105	131
7	101	338	300	305	83	270	90	297	287	289	297	287	273	281	284	304	289	274	281	286	278	281	276	275	291
8	274	280	278	277	279	225	278	278	282	295	278	282	275	273	267	274	290	82	132	135	109	127	141	133	265
9	131	143	136	138	139	225	281	90	207	261	292	279	274	262	266	269	270	118	117	135	143	136	139	136	183
10	139	133	137	142	142	139	137	137	140	142	105	63	295	39	158	174	139	123	138	138	141	136	136	131	134
11	139	141	142	142	142	142	141	140	141	140	119	112	106	104	109	110	77	114	107	109	121	136	105	135	124
12	153	110	111	111	103	106	0	94	117	139	272	280	278	291	277	291	315	90	112	108	112	127	119	107	113
13	111	114	126	121	101	112	136	135	143	144	305	289	280	291	284	277	126	117	107	113	99	137	117	103	126
14	102	105	106	105	102	349	63	101	139	300	287	291	289	282	284	290	276	130	114	105	107	109	114	99	98
15	110	107	103	101	100	102	111	117	143	294	289	295	273	272	270	281	55	112	110	104	109	113	107	98	109
16	96	99	110	111	116	115	103	111	139	297	294	290	294	289	280	247	114	107	117	132	105	136	124	98	120
17	96	98	138	138	139	133	138	137	140	142	204	188	212	177	193	183	119	170	135	135	104	108	112	104	142
18	101	101	104	105	106	101	104	130	131	132	133	183	187	167	185	130	118	107	109	99	104	107	134	112	123
19	115	131	107	204	315	31	45	90	53	56	314	291	282	276	278	259	180	124	104	103	108	98	99	101	93
20	107	94	86	88	90	112	304	90	90	90	130	145	227	214	231	276	302	86	104	102	100	96	94	93	107
21	112	124	96	100	126	304	126	132	123	136	129	208	187	214	181	183	201	90	104	114	109	100	90	141	134
22	229	186	126	120	114	133	100	112	112	140	176	185	184	185	174	176	144	121	120	114	113	112	111	101	139
23	281	333	27	45	93	318	295	135	109	99	101	284	312	318	17	23	102	110	114	118	107	121	133	134	74
24	120	134	128	130	132	139	138	106	132	140	116	167	161	181	161	133	128	135	133	119	131	116	117	108	133
25	107	89	99	100	110	68	112	112	113	101	91	169	201	229	183	196	86	68	115	109	120	104	107	93	115
26	79	101	119	111	109	119	138	95	135	243	291	288	280	266	273	271	312	98	115	121	119	120	135	101	127
27	132	140	138	137	137	130	129	106	134	132	136	298	273	178	170	133	137	109	105	120	111	129	127	139	135
28	122	125	119	110	98	90	90	112	100	126	277	286	287	308	328	309	328	45	70	87	107	103	104	102	87
29	101	110	111	111	115	106	109	122	140	143	140	243	225	267	278	285	346	103	102	113	129	128	112	138	128
30	138	141	140	130	130	138	138	107	136	137	131	158	169	121	127	136	148	100	127	101	98	114	94	109	128
31	100	110	110	90	109	106	112	116	103	122	289	284	278	269	267	267	315	104	99	104	103	110	100	109	110
PV	117	116	118	118	111	108	112	113	126	141	212	238	241	236	229	227	143	107	110	114	111	117	115	114	126

WIND DIRECTION @ 10M  
DEGREES

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								PREV
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	200	205	210	210	215	220	270	285	300	300	320	295	290	280	270	305	295	300	(VA)	140	150	200	160	165	247
2	180	165	170	180	170	165	167	165	185	183	185	200	183	182	198	195	193	197	183	182	165	185	183	189	181
3	185	163	135	160	181	195	190	177	170	183	190	183	187	193	185	183	180	189	180	178	183	193	180	65	178
4	186	193	176	168	183	188	182	178	193	202	212	207	205	207	215	211	229	230	217	232	219	197	223	212	203
5	208	204	237	200	248	129	121	183	174	216	212	194	200	180	202	198	191	177	221	166	178	163	193	215	194
6	268	338	144	193	96	207	208	199	329	215	214	227	223	210	217	225	218	189	189	189	43	164	168	176	203
7	169	145	167	302	286	294	315	317	135	294	307	302	305	317	332	304	304	306	299	306	296	294	300	297	297
8	283	278	298	306	289	305	284	307	287	287	301	305	302	301	288	270	306	265	215	228	203	135	190	221	276
9	122	221	292	261	117	251	262	272	253	311	307	295	315	320	324	312	280	229	203	216	37	149	253	131	266
10	157	225	148	145	127	126	146	146	109	92	9	254	264	215	228	217	215	218	152	111	118	189	112	143	163
11	120	160	125	95	114	119	153	129	127	64	101	92	42	38	347	323	322	229	231	153	94	230	90	109	111
12	247	228	148	251	315	326	261	210	129	92	55	307	301	300	295	271	294	274	229	230	84	204	243	215	256
13	231	174	78	311	214	73	135	27	270	341	296	297	309	291	305	299	300	196	209	209	161	217	223	277	259
14	278	120	248	217	236	234	235	131	147	11	305	340	343	333	311	322	298	232	219	212	307	211	174	180	253
15	253	184	189	197	246	135	133	159	129	98	71	345	341	319	277	307	281	219	196	238	219	150	231	214	212
16	184	242	153	180	289	225	215	222	120	102	74	6	16	11	62	117	135	205	158	71	101	139	117	119	135
17	125	119	116	122	118	113	125	125	103	58	223	217	222	227	214	217	217	215	209	194	326	212	209	211	176
18	201	197	201	207	209	208	202	98	115	206	213	212	214	216	220	210	211	168	115	119	100	114	169	180	184
19	214	209	195	243	234	251	263	245	289	63	330	292	299	333	295	263	251	274	221	217	233	171	215	219	249
20	166	123	217	164	153	161	205	127	112	82	76	223	228	219	221	202	226	226	247	210	154	143	149	189	179
21	122	130	119	129	139	164	151	176	162	186	208	223	216	219	212	217	205	210	210	211	213	214	222	217	188
22	226	202	207	205	197	192	196	197	204	200	208	203	202	208	204	202	205	209	191	216	270	287	269	270	214
23	214	305	207	180	322	325	11	207	107	225	283	321	68	19	49	163	150	178	191	155	153	175	197	92	183
24	133	175	158	136	143	129	184	163	175	190	215	208	202	192	186	189	195	149	153	166	216	222	220	219	180
25	214	216	223	219	214	198	184	196	199	206	222	221	228	229	223	213	213	221	172	163	189	209	202	187	207
26	187	176	123	149	115	128	194	153	120	4	341	355	17	355	324	335	282	188	211	157	197	158	229	115	161
27	148	143	112	116	113	104	112	132	109	169	234	225	216	206	211	194	141	170	114	181	141	112	152	119	151
28	71	153	107	174	215	221	0	315	243	329	309	304	333	326	338	327	335	243	239	243	238	238	235	232	273
29	199	216	0	225	207	196	149	315	114	79	326	0	343	343	351	328	335	224	239	180	175	186	141	158	228
30	135	123	169	150	141	157	169	127	86	180	214	222	222	236	211	216	193	151	143	215	261	194	238	11	181
31	214	79	229	265	262	149	100	231	270	0	6	333	344	324	317	298	297	266	224	191	199	256	235	143	263
PV	189	182	173	191	193	181	185	183	158	168	266	265	269	267	259	246	242	216	200	191	183	190	199	183	207



WIND DIRECTION @ 30M  
DEGREES

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	200	205	210	215	215	225	280	305	310	315	315	305	300	285	310	305	310	315	75	105	120	180	175	175	259
2	185	170	175	175	180	165	170	168	190	190	195	195	187	195	195	195	185	193	182	167	175	193	180	187	184
3	182	170	145	165	182	205	195	170	169	190	197	193	195	194	195	190	188	193	193	180	182	195	183	77	182
4	178	185	169	161	174	181	175	170	182	194	207	200	199	201	207	205	222	221	210	224	213	198	216	215	196
5	213	214	230	192	258	90	111	182	172	209	204	185	191	170	194	190	183	165	200	155	166	171	180	193	185
6	284	331	180	187	106	199	201	193	261	202	207	219	215	203	209	216	210	179	176	179	40	145	153	163	195
7	161	143	150	248	308	318	321	315	90	291	305	294	299	311	331	303	306	306	300	308	300	293	299	297	300
8	283	281	296	305	290	305	284	305	281	282	297	302	302	300	285	268	310	344	209	231	267	94	140	211	284
9	90	81	338	301	39	248	261	270	267	300	299	294	312	318	320	310	282	259	188	175	117	139	262	215	280
10	127	241	135	141	130	126	134	161	138	101	11	251	258	210	220	208	204	205	191	156	164	191	130	129	168
11	135	196	165	158	149	120	169	130	127	74	95	87	42	34	346	333	325	258	254	225	93	211	27	96	122
12	180	272	122	76	90	84	274	262	117	88	55	305	302	301	292	266	295	304	243	257	71	138	289	159	272
13	225	315	39	355	248	207	127	63	59	315	287	291	303	288	301	296	301	104	192	196	51	76	180	335	303
14	297	107	63	251	45	229	241	111	137	42	310	339	343	333	308	315	290	241	212	219	5	236	169	161	281
15	282	126	151	158	280	240	125	126	110	84	70	346	340	316	270	315	281	56	150	200	243	100	148	214	173
16	125	262	214	107	175	168	174	315	112	118	71	11	27	0	56	107	119	194	171	186	105	128	120	94	124
17	131	125	124	105	129	120	127	129	122	148	215	211	214	219	207	210	211	211	205	201	235	213	202	203	177
18	194	195	194	197	198	199	195	131	156	199	206	207	207	210	214	203	202	172	137	167	96	99	170	189	183
19	208	204	178	236	248	270	292	268	323	90	326	285	294	328	298	264	256	312	237	229	346	27	170	201	267
20	0	119	171	129	132	136	159	56	125	76	98	216	220	213	213	195	221	222	254	210	138	118	131	199	164
21	118	145	117	114	145	167	176	176	184	183	199	216	209	214	205	210	199	202	202	203	205	206	214	211	186
22	218	197	201	199	189	186	192	192	194	193	199	216	194	199	197	193	196	202	193	210	244	277	267	266	207
23	219	300	211	192	307	320	0	201	95	284	275	317	59	14	39	143	131	152	183	176	215	194	191	103	204
24	117	172	173	163	143	147	179	171	178	184	208	201	195	185	178	186	194	169	163	176	210	216	213	213	181
25	208	212	217	213	207	194	177	188	191	198	214	213	221	223	216	207	208	213	192	177	183	203	191	183	202
26	195	202	119	161	104	115	163	152	118	0	343	354	11	353	322	331	304	155	207	146	189	144	225	109	147
27	145	167	133	121	131	122	129	130	114	166	225	215	209	198	204	187	142	173	117	186	157	113	175	158	158
28	353	243	61	140	173	228	7	336	248	304	307	306	334	325	335	327	338	282	267	277	272	277	260	256	296
29	232	232	326	235	225	218	214	45	95	77	325	0	343	341	352	327	337	246	260	68	136	169	125	143	283
30	142	138	176	155	140	149	181	191	117	176	204	214	210	226	205	207	184	154	135	228	357	166	280	16	178
31	228	66	104	307	280	249	92	101	98	124	24	332	337	322	316	295	299	307	249	225	315	305	261	194	300
PV	189	191	162	177	178	186	183	169	146	168	256	260	264	264	257	241	240	215	200	197	175	174	192	181	210

WIND DIRECTION # 60M  
DEGREES

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								PREV
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	220	225	220	230	235	240	290	310	330	325	345	310	310	310	300	315	315	320	60	115	125	195	220	190	275
2	205	190	190	195	190	190	187	190	205	210	210	210	207	205	208	210	203	210	208	200	195	208	197	211	201
3	200	183	165	185	187	205	210	193	190	200	203	210	208	210	200	205	198	208	197	195	197	209	220	90	197
4	230	235	230	230	230	235	220	220	250	225	215	215	210	210	210	215	235	230	220	240	185	220	225	230	224
5	230	240	250	205	240	110	135	210	195	205	210	195	205	180	200	205	200	180	260	160	185	190	195	210	201
6	270	270	195	200	140	(VA)	205	210	210	215	220	230	225	215	210	220	210	195	195	190	110	160	170	180	203
7	175	170	160	240	315	345	325	315	60	300	315	300	310	315	340	315	315	320	310	325	315	305	310	305	310
8	290	285	300	305	290	310	285	315	280	285	295	300	310	305	290	270	315	35	140	255	300	(VA)	140	285	294
9	(VA)	60	15	240	30	245	275	280	285	305	290	300	330	325	320	290	275	285	270	205	200	175	185	285	282
10	120	240	180	180	175	155	150	195	195	135	345	285	275	210	230	210	220	225	230	220	200	215	210	195	203
11	200	215	200	215	205	155	210	175	170	165	110	90	(VA)	30	345	0	335	345	285	240	115	(VA)	275	105	193
12	120	295	180	80	70	125	270	300	260	80	60	305	315	300	300	270	290	325	270	270	(VA)	150	250	60	295
13	300	310	290	300	260	285	270	255	50	255	285	295	305	295	310	300	305	30	190	220	205	135	150	(VA)	286
14	275	150	45	(VA)	75	270	255	135	165	(VA)	(VA)	345	0	330	310	300	270	255	225	245	(VA)	165	180	100	254
15	240	255	155	165	325	280	135	130	105	70	80	340	0	330	320	300	0	100	150	170	270	105	120	135	115
16	135	(VA)	190	105	125	163	195	300	120	205	105	15	(VA)	0	60	130	135	225	210	200	45	160	225	(VA)	152
17	170	175	180	230	165	150	160	175	180	240	223	225	230	230	235	230	230	230	235	220	220	250	225	215	210
18	215	210	210	210	210	215	220	210	225	215	220	220	220	225	210	210	215	180	195	205	150	240	215	225	213
19	235	225	190	240	270	290	320	285	290	150	330	285	290	330	305	275	260	320	270	245	100	120	155	190	264
20	15	160	200	165	140	155	175	200	165	75	210	230	240	225	225	200	240	245	280	200	150	165	190	225	196
21	195	215	270	135	195	210	215	200	205	225	215	230	225	225	215	225	215	215	215	210	215	220	215	225	214
22	225	225	210	210	210	205	210	210	210	210	215	210	200	215	220	205	210	215	215	210	230	260	290	255	219
23	255	285	285	240	200	320	0	20	20	10	275	315	60	35	45	270	140	160	200	200	230	210	215	150	265
24	60	200	200	190	180	190	190	200	195	200	215	225	210	195	195	195	210	195	195	195	215	225	225	230	201
25	225	225	230	230	225	215	200	200	210	210	210	225	225	225	225	225	225	235	225	210	190	230	225	210	219
26	210	225	165	190	180	130	170	180	105	5	345	345	15	10	330	330	320	175	240	210	220	180	210	195	210
27	165	190	185	160	165	165	150	165	150	175	240	230	220	210	210	210	180	180	160	195	190	165	185	210	185
28	270	285	45	255	165	270	270	300	245	270	290	320	0	330	345	335	345	345	315	305	300	330	300	290	304
29	305	285	315	315	285	270	245	160	130	100	0	345	330	10	330	345	350	285	305	105	165	200	150	180	302
30	175	180	195	175	175	180	210	220	195	210	225	225	235	230	220	215	190	150	200	15	300	300	330	300	214
31	240	105	100	350	275	180	90	(MT)	180	(VA)	345	345	330	340	300	305	315	325	275	285	340	330	275	240	307
PV	219	222	204	211	203	211	216	218	193	213	254	271	270	273	265	253	251	236	228	215	201	201	212	211	232

WIND DIRECTION @10M

C-B TRACT  
MRI AD42  
DEC 1930

DATA NOT AVAILABLE AT REPORT TIME

WIND DIRECTION @10M

C-B TRACT  
MRI AD56  
DEC 1980

DATA NOT AVAILABLE AT REPORT TIME



WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
10 METER LEVEL

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

HOUR (LOCAL STANDARD TIME)

VECTOR  
DIR VEL

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL
1	175	225	199	202	17	63	297	310	286	284	317	297	288	291	298	300	292	61	85	106	127	126	139	137	286	1.2
2	133	113	104	110	112	107	104	79	119	131	161	191	189	144	136	150	107	104	80	79	66	66	74	78	109	1.9
3	90	110	120	117	114	125	145	126	96	150	174	166	186	181	171	157	105	41	99	116	76	104	75	90	139	1.9
4	72	63	110	110	109	114	122	123	103	173	191	180	183	188	202	192	233	226	185	256	104	120	172	180	155	2.1
5	109	115	139	120	114	104	99	107	128	129	201	182	162	144	182	156	129	123	304	122	117	130	90	321	140	1.3
6	90	114	111	100	90	333	112	114	109	90	268	203	228	206	228	223	204	270	22	112	112	109	114	105	186	0.5
7	101	338	300	305	83	270	90	297	287	289	297	287	273	281	284	304	289	274	281	286	278	281	276	275	284	1.5
8	274	280	278	277	279	287	278	278	282	295	278	282	275	273	267	274	290	82	132	135	109	127	141	133	275	1.5
9	131	143	136	138	139	225	281	90	207	261	292	279	274	262	266	269	270	118	117	135	143	136	139	136	168	0.8
10	139	133	137	142	142	139	137	137	140	142	105	63	295	39	158	174	139	123	138	138	141	136	136	131	137	2.5
11	139	141	142	142	142	142	141	140	141	140	119	112	106	104	109	110	77	114	107	109	121	136	105	135	132	2.6
12	153	110	111	111	103	106	0	94	117	139	272	280	278	291	277	291	315	90	112	108	112	127	119	107	134	0.4
13	111	114	126	121	101	112	136	135	143	144	305	289	280	291	284	277	126	117	107	113	99	137	117	103	132	0.8
14	102	105	106	105	102	349	63	101	139	300	287	291	289	282	284	290	276	130	114	105	107	109	114	99	111	0.2
15	110	107	103	101	100	102	111	117	143	294	289	295	273	272	270	281	55	112	110	104	109	113	107	98	121	0.5
16	96	99	110	111	116	115	103	111	139	297	294	290	294	289	280	247	114	107	117	132	105	136	124	98	120	0.9
17	96	98	138	138	139	133	138	137	140	142	204	188	212	177	193	183	119	170	135	135	104	108	112	104	141	1.9
18	101	101	104	105	106	101	104	130	131	132	133	183	187	167	185	130	118	107	109	99	104	107	134	112	123	1.8
19	115	131	107	204	315	31	45	90	53	56	314	291	282	276	278	259	180	124	104	103	108	98	99	101	111	0.3
20	107	94	86	88	90	112	304	90	90	90	130	145	227	214	231	276	302	86	104	102	100	96	94	93	127	0.6
21	121	112	124	96	100	126	304	126	132	123	136	129	208	187	214	181	183	201	90	104	114	109	90	141	147	1.2
22	229	186	126	120	114	133	100	112	112	140	176	185	184	185	174	176	144	121	120	114	113	112	111	101	147	1.6
23	281	333	27	45	93	318	295	135	109	99	101	284	312	318	17	23	102	110	114	118	107	121	133	134	98	0.5
24	120	134	128	130	132	139	138	106	132	140	116	167	161	181	161	133	128	135	133	119	131	116	117	108	135	2.3
25	107	89	99	100	110	68	112	112	113	101	91	169	201	229	183	196	86	68	115	109	120	104	107	93	119	1.0
26	79	101	119	111	109	119	138	95	135	243	291	288	280	266	273	271	312	98	115	121	119	120	135	101	131	0.6
27	132	140	138	137	137	130	129	106	134	132	136	298	273	178	170	133	137	109	105	120	111	129	127	139	135	2.1
28	122	125	119	110	98	90	90	112	100	126	277	286	287	308	328	309	328	45	70	87	107	103	102	108	75	0.3
29	101	110	111	111	115	106	109	122	140	143	140	243	225	267	278	285	346	103	102	113	129	128	112	138	126	1.1
30	138	141	140	130	130	138	138	107	136	137	131	158	169	121	127	136	148	100	127	101	98	114	94	109	131	2.2
31	100	110	110	90	109	106	112	116	103	122	289	284	278	269	267	267	315	104	99	104	103	110	100	109	139	0.3
V0	120	121	125	126	123	122	129	122	131	148	181	231	238	233	223	219	139	112	115	112	111	117	118	116	138	
VV	1.3	1.5	1.6	1.4	1.6	1.3	1.4	1.4	1.6	1.2	0.7	1.1	1.7	1.5	1.2	0.8	0.2	0.9	1.1	1.3	1.6	1.6	1.4	1.3		0.9

TOTAL NUMBER OF OBSERVATIONS = 744

NOTE: \*\*\*\* = MISSING DATA

WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
10 METER LEVEL

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																								VECTOR	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL
1	200	205	210	210	215	220	270	285	300	300	320	295	290	280	270	305	295	300	***	140	150	200	160	165	285	2.3
2	180	165	170	180	170	165	167	165	185	183	185	200	183	182	198	195	193	197	183	182	165	185	183	189	183	7.1
3	185	163	135	160	181	195	190	177	170	183	190	183	187	193	185	183	180	189	180	178	183	193	180	65	182	5.8
4	186	193	176	168	183	188	182	178	193	202	212	207	205	207	215	211	229	230	217	232	219	197	223	212	204	5.5
5	208	204	237	200	248	129	121	183	174	216	212	194	200	180	202	198	191	177	221	166	178	183	193	215	194	2.5
6	268	338	144	193	96	207	208	199	329	215	214	227	223	210	217	225	218	189	189	189	43	164	168	176	209	2.2
7	169	145	167	302	286	294	315	317	135	294	307	302	305	317	332	304	304	306	299	306	296	294	300	297	298	1.3
8	283	278	298	306	289	305	284	307	287	287	301	305	302	301	288	270	306	265	215	228	203	135	190	221	286	1.5
9	122	221	292	261	117	251	262	272	253	311	307	295	315	320	324	312	280	229	203	216	37	149	253	131	282	0.7
10	157	225	148	145	127	126	146	146	109	92	9	254	264	215	228	217	215	218	152	111	118	189	112	143	167	0.9
11	120	160	125	95	114	119	153	129	127	64	101	92	42	38	347	323	322	229	231	153	94	230	90	109	118	0.6
12	247	228	148	251	315	326	261	210	129	92	55	307	301	300	295	271	294	274	229	230	84	204	243	215	263	0.6
13	231	174	78	311	214	73	135	27	270	341	296	297	309	291	305	299	300	196	209	209	161	217	223	277	281	0.7
14	278	120	248	217	236	234	235	131	147	11	305	340	343	333	311	322	298	232	219	212	307	211	174	180	266	0.4
15	253	184	189	197	246	135	133	159	129	98	71	345	341	319	277	307	281	219	196	238	219	150	231	214	201	0.3
16	184	242	153	180	289	225	215	222	120	102	74	6	16	11	62	117	135	205	158	71	101	139	117	119	129	0.5
17	125	119	116	122	118	113	125	125	103	58	223	217	222	227	214	217	217	215	209	194	326	212	209	211	194	1.8
18	201	197	201	207	209	208	202	98	115	206	213	212	214	216	220	210	211	168	115	119	100	114	169	180	200	2.1
19	214	209	195	243	234	251	263	245	289	63	330	292	299	333	295	263	251	274	221	217	233	171	215	219	248	0.8
20	166	123	217	164	153	161	205	127	112	82	76	223	228	219	221	202	226	226	247	210	154	143	149	189	203	1.1
21	122	130	119	129	139	164	151	176	162	186	208	223	216	219	212	217	205	210	210	211	213	214	222	217	205	3.0
22	226	202	207	205	197	192	196	197	204	200	208	203	202	208	204	202	205	209	191	216	270	287	269	270	209	3.8
23	214	305	207	180	322	325	11	207	107	225	283	321	68	19	49	163	150	178	191	155	153	175	197	92	202	0.1
24	133	175	158	136	143	129	184	163	175	190	215	208	202	192	186	189	195	149	153	166	216	222	220	219	194	2.5
25	214	216	223	219	214	198	184	196	199	206	222	221	228	229	223	213	213	221	172	163	189	209	202	187	212	2.9
26	187	176	123	149	115	128	194	153	120	4	341	355	17	355	324	335	282	188	211	157	197	158	229	115	154	0.2
27	148	143	112	116	113	104	112	132	109	169	234	225	216	206	211	194	141	170	114	181	141	112	152	119	163	1.4
28	71	153	107	174	215	221	0	315	243	329	309	304	333	326	338	327	335	243	239	243	238	238	235	232	289	0.8
29	199	216	0	225	207	196	149	315	114	79	326	0	343	343	351	328	335	224	239	180	175	186	141	158	212	0.3
30	135	123	169	150	141	157	169	127	86	180	214	222	222	236	211	216	193	151	143	215	261	194	238	11	183	1.2
31	214	79	229	265	262	149	100	231	270	0	6	333	344	324	317	298	297	266	224	191	199	256	235	143	289	0.5
VD	194	184	182	185	184	177	181	177	176	194	216	226	225	230	226	227	223	212	203	195	185	198	206	197	204	
VV	1.4	1.3	1.3	1.3	1.2	1.2	1.4	1.3	1.2	1.2	1.8	2.2	2.0	1.9	2.1	1.9	1.7	2.0	1.9	1.4	1.2	1.5	1.6	1.2		1.5

TOTAL NUMBER OF OBSERVATIONS = 735

NOTE: \*\*\*\* = MISSING DATA



WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
30 METER LEVEL

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR											LOCAL STANDARD TIME								VECTOR							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL	
1	200	205	210	215	215	225	280	305	310	315	315	305	300	285	310	305	310	315	75	105	120	180	175	175	302	2.6	
2	185	170	175	175	180	165	170	168	190	190	195	195	187	195	195	195	185	193	182	187	175	193	180	187	185	9.8	
3	182	170	145	165	182	205	195	170	169	190	197	193	195	194	195	190	188	193	193	180	182	195	183	77	186	8.4	
4	178	185	169	161	174	181	175	170	185	194	207	200	199	201	207	205	222	221	210	224	213	198	216	215	197	7.6	
5	213	214	230	192	258	90	111	182	172	209	204	185	191	170	194	190	183	165	200	155	166	171	180	193	186	3.8	
6	284	331	180	187	106	199	201	193	261	202	207	219	215	203	209	216	210	179	176	179	40	145	153	163	198	3.2	
7	161	143	150	248	308	318	321	315	90	291	305	294	299	311	331	303	306	306	300	308	300	293	299	297	298	1.6	
8	283	281	296	305	290	305	284	305	281	282	297	302	302	300	285	268	310	344	209	231	267	94	140	211	291	1.8	
9	90	81	338	301	39	248	261	270	267	300	299	294	312	318	320	310	282	259	188	175	117	139	262	215	290	0.9	
10	127	241	135	141	130	126	134	161	138	101	11	251	258	210	220	208	204	205	191	156	164	191	130	129	175	1.5	
11	135	196	165	158	149	120	169	130	127	74	95	87	42	34	346	333	325	258	254	225	93	211	27	96	122	0.7	
12	180	272	122	76	90	84	274	262	117	88	55	305	302	301	292	266	295	304	243	257	71	138	289	159	282	0.6	
13	225	315	39	355	248	207	127	63	59	315	287	291	303	288	301	296	301	104	192	196	51	76	180	335	292	0.7	
14	297	107	63	251	45	229	241	111	137	42	310	339	343	333	308	315	290	241	212	219	5	236	169	161	285	0.3	
15	282	126	151	158	280	240	125	126	110	84	70	346	340	316	270	315	281	56	150	200	243	100	148	214	124	0.3	
16	125	262	214	107	175	168	174	315	112	118	71	11	27	0	56	107	119	194	171	186	105	128	120	94	123	0.7	
17	131	125	124	105	129	120	127	129	122	148	215	211	214	219	207	210	211	211	205	201	235	213	202	203	194	3.0	
18	194	195	194	197	198	199	195	131	156	199	206	207	207	210	214	203	202	172	137	167	96	99	170	189	196	3.3	
19	208	204	178	236	248	270	292	268	323	90	326	285	294	328	298	264	256	312	237	229	346	27	170	201	262	0.9	
20	0	119	171	129	132	136	159	56	125	76	98	216	220	213	213	195	221	222	254	210	138	118	131	199	197	1.4	
21	118	145	117	114	145	167	176	176	184	183	199	216	209	214	205	210	199	202	202	203	205	206	214	211	201	4.4	
22	218	197	201	199	189	186	192	192	194	193	201	196	194	199	197	193	196	202	193	210	244	277	267	266	203	5.4	
23	219	300	211	192	307	320	0	201	95	284	275	317	59	14	39	143	131	152	183	176	215	194	191	103	200	0.4	
24	117	172	173	163	143	147	179	171	178	184	208	201	195	185	178	186	194	169	163	176	210	216	213	213	191	3.8	
25	208	212	217	213	207	194	177	188	191	198	214	213	221	223	216	207	208	213	192	177	183	203	191	183	205	4.6	
26	195	202	119	161	104	115	163	152	118	0	343	354	11	353	322	331	304	155	207	146	189	144	225	109	147	0.3	
27	145	167	133	121	131	122	129	130	114	166	225	215	209	198	204	187	142	173	117	186	157	113	175	158	166	2.2	
28	353	243	61	140	173	228	7	336	248	304	307	306	334	325	335	327	338	282	267	277	272	277	260	256	308	1.1	
29	232	232	326	235	225	218	214	45	95	77	325	0	343	341	352	327	337	246	260	68	136	169	125	143	216	0.2	
30	142	138	176	155	140	149	181	191	117	176	204	214	210	226	205	207	184	154	135	228	357	166	280	16	179	1.7	
31	228	66	104	307	280	249	92	101	98	124	24	332	337	322	316	295	299	307	249	225	315	305	261	194	312	0.7	
VD	192	188	181	181	182	174	178	174	173	193	214	220	220	225	221	220	217	207	200	194	184	195	199	194	200		
VV	1.9	1.8	1.9	1.9	1.9	1.7	2.0	2.0	1.8	1.8	2.5	2.9	2.6	2.5	2.7	2.6	2.3	2.6	2.3	1.9	1.7	2.1	2.2	1.7		2.0	

TOTAL NUMBER OF OBSERVATIONS = 736

NOTE: \*\*\*\* = MISSING DATA

WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
60 METER LEVEL

CR-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																								VECTOR		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL	
1	220	225	220	230	235	240	290	310	330	325	345	310	310	310	300	315	315	320	60	115	125	195	220	190	310	310	2.5
2	205	190	190	195	190	190	187	190	205	210	210	210	207	205	208	210	203	210	208	208	195	208	197	211	202	9.7	
3	200	183	165	185	187	205	210	193	190	200	203	210	208	210	200	205	198	208	197	195	197	209	220	90	200	8.2	
4	230	235	230	230	230	235	220	220	250	225	215	215	210	210	210	215	235	230	220	220	185	220	225	230	223	7.9	
5	230	240	250	205	240	110	135	210	195	205	210	195	205	180	200	205	200	180	260	160	185	190	195	210	203	4.0	
6	270	270	195	200	140	***	205	210	210	215	220	230	225	215	210	220	210	195	195	190	110	160	170	180	207	3.7	
7	175	170	160	240	315	345	325	315	60	300	315	300	310	315	340	315	315	320	310	325	315	305	305	307	1.7		
8	290	285	300	305	290	310	285	315	280	285	295	300	310	305	290	270	315	35	140	255	300	***	140	285	298	1.9	
9	***	60	15	240	30	245	275	280	285	305	290	300	330	325	320	290	275	285	270	205	200	175	185	285	292	1.2	
10	120	240	180	180	175	155	150	195	175	135	345	285	275	210	230	210	220	225	230	220	200	215	210	195	209	1.8	
11	200	215	200	215	205	155	210	175	170	165	110	90	***	30	345	0	335	345	285	240	115	***	275	105	185	0.8	
12	120	295	180	80	70	125	270	300	260	80	60	305	315	300	300	270	290	325	270	270	***	150	250	60	290	0.6	
13	300	310	290	300	260	285	270	0	50	255	285	295	305	295	310	300	305	30	190	220	205	135	150	***	290	0.9	
14	275	150	45	***	75	270	255	135	165	***	***	345	0	330	310	300	270	255	225	245	***	165	180	100	257	0.4	
15	240	255	155	165	325	280	135	130	105	70	80	340	0	330	320	300	0	100	150	170	270	105	120	135	116	0.4	
16	135	***	190	105	125	163	195	300	120	205	105	15	***	0	80	130	135	225	210	200	45	160	225	***	156	0.7	
17	170	175	180	230	165	150	160	175	180	240	223	225	230	230	235	230	230	230	235	220	220	250	225	215	220	3.6	
18	215	210	210	210	210	215	210	210	225	215	220	220	220	225	230	210	215	180	195	205	150	240	215	225	214	4.0	
19	235	225	190	240	270	290	320	285	290	150	330	285	290	330	305	275	260	320	270	245	100	120	155	190	269	0.8	
20	15	160	200	165	140	155	175	200	165	75	210	230	240	225	225	200	240	245	280	200	150	165	190	225	213	1.5	
21	195	215	270	135	195	210	215	200	205	225	215	230	225	225	215	225	215	215	215	210	215	220	215	225	217	4.6	
22	225	225	210	210	210	205	210	210	210	210	215	210	200	215	220	205	210	215	215	210	230	260	290	255	217	5.6	
23	255	285	285	240	200	320	0	20	20	10	275	315	60	35	45	270	140	160	200	200	230	210	215	150	242	0.6	
24	60	200	200	190	180	190	190	200	195	200	215	225	210	195	195	195	210	195	195	195	215	225	225	230	208	4.0	
25	225	225	230	230	225	215	200	200	210	210	210	225	225	225	225	225	225	225	225	210	190	230	225	210	220	5.0	
26	210	225	165	190	180	130	170	180	105	5	345	345	15	10	330	330	320	175	240	210	220	180	210	195	213	0.5	
27	165	190	185	160	165	165	150	165	150	175	240	230	220	210	210	210	180	180	160	195	190	165	185	210	189	2.5	
28	270	285	45	255	165	270	270	300	245	270	290	320	0	330	345	335	345	345	315	305	300	330	300	290	320	1.3	
29	305	285	315	315	285	270	245	160	130	100	0	345	330	10	330	345	350	285	305	105	165	200	150	180	278	0.4	
30	175	180	195	175	175	180	210	220	195	210	225	225	235	230	220	215	190	150	200	15	300	300	330	300	209	1.8	
31	240	105	100	350	275	180	90	***	180	***	345	345	330	340	300	305	315	325	275	285	340	330	275	240	314	0.9	
VD	216	216	208	210	208	209	205	207	207	213	224	235	233	237	232	232	230	224	222	209	199	211	220	215	219		
VV	2.2	2.4	2.1	2.4	2.2	1.9	2.2	2.3	1.8	2.1	2.4	2.8	2.9	2.5	2.7	2.8	2.5	2.6	2.6	2.2	2.2	2.4	2.6	2.2		2.3	

TOTAL NUMBER OF OBSERVATIONS = 719

NOTE: \*\*\* = MISSING DATA



SIGMA HORIZ. WIND DIR. W10M  
DEGREES

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	35	40	33	27	22	11	14	8	9	11	17	14	13	14	12	11	7	4	1	4	5	6	5	4	14	40
2	7	3	2	4	14	15	16	12	11	18	29	20	23	19	24	24	22	10	13	12	14	12	8	9	14	29
3	6	5	6	3	3	11	13	6	4	19	19	21	21	21	19	16	19	10	12	9	10	19	12	11	12	21
4	11	11	10	12	10	10	9	9	15	30	26	25	24	22	28	23	28	28	28	25	36	8	36	11	20	36
5	8	16	16	16	10	15	12	9	9	12	18	18	16	13	18	17	8	9	13	6	6	10	11	20	13	20
6	4	5	6	18	3	28	2	5	1	1	20	26	23	24	22	22	20	6	4	3	7	4	7	12	11	28
7	1	34	17	6	2	21	1	11	7	8	6	8	8	6	6	8	8	3	5	9	5	7	5	6	8	34
8	8	6	6	5	4	6	5	6	6	8	8	10	8	9	10	7	6	4	3	2	2	4	5	5	6	10
9	6	6	7	4	4	6	3	2	5	6	10	10	10	9	10	6	4	7	6	7	5	5	6	6	6	10
10	7	7	6	6	6	8	6	4	5	5	9	10	3	3	8	4	2	7	5	4	5	8	8	8	6	10
11	5	6	6	6	6	6	5	4	5	5	6	4	0	0	0	0	5	2	2	4	8	9	4	7	5	9
12	20	3	5	4	4	12	4	3	5	5	9	6	8	7	7	4	5	3	2	2	5	6	6	3	6	26
13	3	8	8	7	9	15	7	8	13	4	10	7	7	8	6	1	7	1	1	2	4	7	10	10	7	17
14	6	9	9	7	9	3	5	5	6	10	2	6	8	9	6	1	6	6	4	2	9	7	17	3	7	10
15	1	2	5	6	8	15	5	5	11	1	1	6	0	0	5	4	0	2	4	5	5	6	6	2	4	11
16	7	3	6	7	5	1	1	4	4	9	9	24	15	20	15	14	15	18	15	3	8	7	8	7	10	24
17	1	3	11	8	5	5	5	5	4	4	3	10	16	12	15	16	2	6	6	4	8	7	5	5	7	16
18	5	4	6	6	4	4	6	6	6	0	7	6	5	6	5	1	3	1	2	2	3	2	2	2	4	10
19	6	8	4	10	3	4	0	2	0	0	3	10	14	14	17	11	12	4	5	6	8	5	8	7	6	17
20	3	3	2	1	1	1	8	2	5	3	3	6	5	6	5	1	12	4	5	6	7	5	8	7	6	17
21	11	15	11	13	11	17	8	5	3	5	5	28	16	17	15	18	15	9	8	11	7	8	6	28	12	28
22	15	17	9	11	12	15	6	6	2	13	18	19	17	18	15	14	7	4	3	1	1	2	0	10	10	19
23	8	2	4	1	4	9	19	2	1	0	1	7	2	10	21	16	6	3	5	7	5	6	6	6	6	21
24	6	6	8	6	7	5	5	3	6	5	5	12	14	12	13	7	6	9	6	9	8	14	13	7	8	14
25	10	14	27	3	12	2	5	3	2	5	3	14	18	22	13	8	7	6	2	2	9	1	2	5	8	27
26	1	5	8	7	7	7	8	5	7	9	1	3	6	6	3	3	2	5	5	9	6	8	6	4	5	9
27	6	6	6	7	6	8	7	6	10	7	4	7	12	15	19	7	9	16	7	9	11	12	11	11	9	19
28	10	9	13	9	8	31	6	5	8	3	10	8	9	14	22	10	5	2	1	1	2	2	2	4	8	31
29	5	5	4	5	6	3	6	7	6	4	3	7	4	6	5	1	4	5	2	9	6	8	9	6	5	9
30	7	5	7	10	13	5	7	9	8	5	2	2	17	10	8	6	4	3	8	6	7	11	7	8	7	17
31	5	9	9	3	3	7	9	9	5	1	8	6	6	6	6	6	10	6	5	5	7	7	6	8	6	10
AV	8	9	9	8	7	10	7	6	6	7	9	12	11	12	12	9	8	7	6	6	7	7	8	8	8	40
PK	35	40	33	27	22	31	19	12	15	30	29	28	24	24	28	24	28	28	28	25	36	19	36	28		

SIGMA HORIZ. WIND DIR. @ 10M  
DEGREES

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
2	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
3	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
4	18	12	10	10	10	9	10	7	10	11	11	11	11	12	12	11	11	10	10	9	10	17	9	11	11	18
5	7	16	11	11	11	4	17	16	19	11	11	11	10	11	11	9	7	5	20	5	3	4	9	13	11	20
6	13	18	23	14	12	24	12	8	13	14	11	10	11	12	12	12	11	6	5	11	13	12	5	4	12	24
7	4	5	5	14	18	13	10	11	13	7	9	8	9	8	9	8	8	7	6	7	6	7	6	6	9	18
8	6	5	7	6	6	7	8	7	9	10	14	13	13	14	12	17	6	11	2	13	10	14	10	15	10	17
9	11	15	21	12	14	4	7	5	9	9	19	18	15	14	15	12	6	4	4	12	17	19	17	15	12	21
10	11	23	6	5	4	5	7	15	11	9	24	20	23	20	14	11	6	6	16	22	21	25	16	10	14	25
11	9	25	15	13	12	5	9	5	7	9	11	24	18	21	31	19	10	4	4	11	9	6	20	16	13	31
12	11	11	6	17	18	15	9	7	9	8	16	15	8	10	6	8	6	8	4	7	12	18	18	7	11	18
13	11	13	10	10	9	6	21	16	18	16	13	11	11	16	11	10	6	13	2	18	13	20	13	11	12	21
14	8	6	10	8	13	19	8	13	23	33	17	12	21	14	13	8	6	5	17	12	23	13	35	15	15	35
15	13	11	26	12	11	22	7	4	10	15	18	25	25	24	42	31	22	14	9	11	13	20	12	18	17	42
16	17	15	16	19	12	12	16	10	8	13	17	16	13	29	19	13	6	6	16	18	7	5	6	11	14	29
17	4	8	6	5	4	5	4	4	5	20	16	11	13	10	16	10	9	12	40	52	39	32	14	10	15	52
18	8	9	9	9	8	8	16	14	30	21	10	11	13	12	10	8	8	26	31	15	10	22	6	8	13	31
19	5	3	6	25	11	9	6	6	44	15	10	10	14	12	7	6	7	10	4	3	14	12	11	7	11	44
20	11	5	9	8	10	5	9	16	19	9	29	15	18	12	11	8	9	6	8	5	7	5	6	10	11	29
21	8	4	6	6	4	7	12	4	15	17	18	11	11	11	10	9	8	8	9	9	9	9	10	11	10	18
22	10	11	11	9	8	8	9	9	9	10	10	11	12	10	9	7	7	9	16	31	23	10	9	9	11	31
23	7	23	7	15	10	8	6	9	10	25	14	12	18	22	13	17	5	8	10	13	13	17	9	7	12	25
24	5	5	7	8	5	6	6	12	11	19	11	13	9	10	10	11	14	42	33	27	35	9	12	9	14	42
25	9	11	9	9	9	8	6	11	10	9	11	11	12	13	9	8	7	10	20	20	7	14	20	18	11	20
26	20	10	8	12	9	7	20	14	13	24	23	26	21	18	16	6	7	9	14	10	17	14	21	13	15	26
27	8	11	9	4	17	6	12	8	10	13	13	11	12	13	10	17	27	24	14	10	12	6	12	10	12	27
28	25	8	8	7	17	7	12	9	29	18	9	13	17	13	9	7	6	8	5	8	5	6	6	6	11	29
29	6	7	11	7	10	20	11	14	14	20	27	32	28	24	31	20	7	4	10	21	9	14	9	7	15	32
30	8	5	11	9	4	6	15	31	13	20	11	13	17	17	13	9	7	9	6	23	14	19	10	16	13	31
31	9	10	19	8	9	9	9	11	12	25	18	15	10	14	13	10	4	8	3	15	16	12	12	9	12	25
AV	10	11	11	11	10	9	11	11	14	15	15	15	15	15	14	12	9	10	12	15	14	14	12	11	12	
PK	25	25	26	25	18	24	21	31	44	33	29	32	28	29	42	31	27	42	40	52	39	32	35	18		52

SIGMA HORIZ. WIND DIR. @ 30M  
DEGREES

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
2	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
3	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
4	16	11	10	8	10	10	10	7	9	10	10	10	10	10	11	10	10	9	8	8	15	17	8	9	10
5	5	16	9	12	13	20	17	18	17	11	10	10	9	11	10	9	6	3	19	4	3	2	6	10	10
6	17	24	22	13	10	16	11	7	14	15	10	9	10	11	10	11	10	6	4	10	12	8	5	4	11
7	3	4	4	15	8	16	15	9	11	6	14	6	7	7	8	6	6	5	6	5	5	5	5	5	8
8	5	5	5	5	5	6	6	6	7	10	13	12	12	12	11	18	6	11	8	11	12	8	8	16	9
9	9	14	11	45	16	8	8	3	8	9	20	15	15	13	13	11	6	7	8	12	26	27	13	36	15
10	7	12	9	9	8	5	5	7	7	6	22	20	21	16	13	9	4	3	25	34	16	14	22	9	13
11	16	13	16	36	15	4	8	5	7	8	9	16	20	20	26	21	8	17	8	10	7	27	22	7	14
12	16	8	8	20	12	11	13	9	28	6	16	15	6	8	5	7	5	8	7	12	8	6	20	16	11
13	17	27	11	6	12	50	22	10	10	43	13	10	9	14	9	9	6	8	5	11	10	7	18	11	15
14	8	6	15	36	16	33	13	13	21	12	25	11	25	12	14	9	7	4	24	14	17	14	32	20	17
15	25	10	12	15	13	24	8	4	5	14	15	21	20	23	32	22	15	15	8	10	10	6	22	29	16
16	19	30	16	7	18	21	15	27	5	12	15	13	38	21	13	10	3	5	18	32	12	5	17	14	16
17	6	17	16	8	6	3	4	5	7	27	17	11	11	8	15	8	6	10	30	37	51	25	11	8	14
18	7	9	7	8	7	7	13	31	33	22	8	10	12	10	9	7	7	23	28	21	24	38	10	12	15
19	6	3	5	30	7	7	7	7	17	14	9	11	13	10	7	6	5	5	8	6	10	30	11	8	10
20	11	6	10	10	6	5	11	16	12	7	29	12	14	11	10	8	6	5	9	5	5	10	9	18	10
21	17	13	20	10	14	10	21	4	15	20	16	9	10	10	9	8	7	7	13	28	8	8	8	10	11
22	8	10	10	9	7	9	9	8	9	8	10	10	11	9	9	6	6	7	13	28	25	10	8	8	10
23	11	18	2	9	13	7	6	3	12	35	13	12	16	21	12	20	4	4	7	11	33	23	5	10	13
24	6	5	9	11	5	9	5	13	13	21	10	11	9	9	8	10	13	42	36	27	26	8	9	7	13
25	8	9	7	7	7	7	5	9	9	9	10	10	12	11	9	6	5	7	27	17	6	8	15	14	10
26	17	15	11	15	14	4	18	14	25	30	18	17	17	17	21	6	6	9	17	11	13	14	23	21	16
27	5	7	12	6	12	8	10	7	8	15	12	9	11	11	9	23	23	25	20	9	12	10	7	22	12
28	34	17	11	6	18	14	12	24	38	25	9	13	19	11	8	5	4	14	6	7	8	7	9	7	14
29	7	7	13	11	15	7	12	12	8	18	23	27	24	17	24	21	5	12	8	20	5	14	10	6	14
30	12	9	9	9	4	7	14	37	30	18	10	11	16	14	11	8	6	11	13	30	13	11	13	12	14
31	16	8	18	20	8	11	5	20	13	16	13	19	8	13	11	8	4	8	10	12	9	24	15	16	13
AV	12	12	11	14	11	12	11	12	14	16	14	13	14	13	12	11	7	10	14	15	14	14	13	13	13
PK	34	30	22	45	18	50	22	37	38	43	29	27	38	23	32	23	23	42	36	37	51	38	32	36	51



CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

II-155



TEMPERATURE  
DEGREE C

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	8	8	7	7	3	1	2	-1	0	2	3	4	4	6	6	6	3	-1	-3	-4	-6	-6	-4	-2	2
2	-2	-2	-1	2	6	6	6	6	7	9	10	11	11	12	12	12	10	8	9	9	9	9	9	9	7
3	8	7	8	8	7	7	8	7	8	11	12	12	13	14	13	13	11	8	9	9	10	9	9	11	10
4	11	11	10	10	10	10	9	9	10	12	12	12	12	13	12	11	9	9	8	7	4	2	3	2	9
5	1	2	2	3	1	1	2	2	3	4	6	7	6	6	7	6	4	3	3	1	1	1	-1	-2	3
6	-2	-3	-2	-2	-1	-1	-1	0	1	2	5	6	6	7	7	6	4	3	1	-1	-1	-2	-3	-3	1
7	-2	-2	-2	-2	-2	-2	-2	-2	-2	-1	0	0	1	1	1	1	0	-1	-1	-1	-2	-2	-3	-3	-1
8	-4	-4	-4	-4	-5	-5	-6	-6	-6	-5	-4	-2	-2	-2	-1	-1	-2	-5	-7	-9	-11	-11	-11	-11	-5
9	-12	-11	-11	-10	-9	-8	-8	-8	-8	-6	-3	3	5	6	7	6	3	-1	-2	-3	-4	-4	-5	-5	-1
10	-11	-12	-11	-11	-10	-10	-10	-9	-8	-4	1	3	5	6	7	6	2	-1	-2	-3	-3	-4	-4	-4	-1
11	-6	-6	-6	-6	-6	-7	-6	-6	-4	0	6	8	10	11	12	11	6	2	-1	-2	-3	-4	-5	-5	0
12	-7	-8	-7	-8	-9	-9	-12	-11	-8	-3	1	3	6	7	8	7	4	-1	-3	-4	-5	-6	-6	-8	-3
13	-9	-9	-9	-10	-9	-11	-11	-11	-9	-5	-1	1	3	4	5	4	1	-2	-4	-5	-7	-7	-7	-8	-5
14	-9	-9	-9	-10	-9	-9	-13	-11	-7	-7	-1	3	6	7	8	8	4	1	-1	-3	-3	-4	-4	-3	-3
15	-4	-6	-4	-6	-8	-7	-7	-6	-3	-2	2	6	8	10	11	11	7	2	1	-1	-2	-2	-3	-3	0
16	-3	-4	-4	-3	-3	-4	-4	-4	-2	-3	3	7	12	14	14	13	9	6	3	2	1	1	0	0	2
17	-1	-1	-1	-2	0	-1	-1	0	2	5	11	16	16	17	16	16	12	8	7	6	4	2	2	1	6
18	1	1	1	1	1	0	-1	0	2	5	11	13	13	14	13	12	10	7	4	3	3	2	2	1	5
19	1	-1	-1	-2	-4	-6	-6	-7	-4	-1	1	3	6	5	6	7	4	1	-1	-2	-2	-3	-4	-4	-1
20	-4	-4	-4	-4	-7	-6	-7	-8	-6	-1	4	8	11	11	10	9	7	2	0	-1	-2	-2	-3	-3	0
21	-3	-3	-3	-3	-2	-3	-2	-1	0	3	8	10	11	11	11	10	8	5	3	3	4	3	4	7	3
22	7	6	5	5	5	4	4	4	4	7	8	9	10	10	9	9	8	6	6	4	4	3	3	3	6
23	3	2	2	0	0	1	1	1	1	1	6	8	9	9	9	8	6	-1	-2	-3	-4	-4	-3	-3	1
24	-3	-4	-4	-4	-5	-4	-3	-3	-2	1	6	8	11	12	12	11	9	5	4	4	4	5	6	7	2
25	7	6	7	6	6	4	3	2	4	7	8	11	11	12	12	11	9	7	6	6	6	6	5	3	7
26	2	1	0	1	-2	-2	-1	-2	0	3	6	9	12	12	13	12	9	7	5	3	2	2	2	1	4
27	1	2	2	1	1	1	1	1	2	6	10	12	13	16	15	14	11	7	5	4	3	2	2	2	5
28	2	2	2	2	2	1	-1	-2	-1	4	7	9	11	12	13	12	10	6	3	1	-1	-2	-2	-3	4
29	-3	-4	-4	-4	-5	-6	-6	-6	-4	-2	3	7	8	10	11	10	6	2	-1	-2	-2	-3	-3	-3	0
30	-3	-3	-3	-4	-4	-3	-3	-4	-2	2	8	12	13	13	13	13	9	4	3	1	-1	-1	-1	-2	2
31	-4	-3	-4	-6	-7	-7	-6	-6	-4	1	4	7	10	12	13	12	9	3	1	0	-1	-2	-3	-3	1
AV	-1	-2	-2	-2	-2	-2	-3	-3	-1	1	5	7	8	9	9	9	6	3	2	0	0	-1	-1	-1	2
PK	11	11	10	10	10	10	9	9	10	12	12	16	16	17	16	16	12	9	9	9	10	9	9	11	17
MN	-12	-12	-11	-11	-11	-11	-13	-11	-9	-7	-4	-3	-2	-2	-1	-1	-2	-5	-7	-9	-11	-11	-11	-11	

MONTHLY MINIMUM = -13

TEMPERATURE @ 10M  
DEGREE C

CR-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	7	7	7	6	6	6	4	2	0	1	1	2	3	3	4	4	4	3	3	2	1	-1	1	2	3	7
2	3	4	4	5	5	5	6	5	7	7	8	9	9	9	9	10	11	9	8	7	6	7	7	7	7	10
3	7	6	6	6	7	7	6	6	6	8	8	8	9	9	12	12	12	11	10	9	9	8	9	8	9	12
4	8	8	8	8	8	8	7	7	7	3	3	3	3	3	3	3	2	6	4	3	3	2	1	1	6	9
5	1	2	1	1	1	1	2	2	2	3	3	3	3	2	3	3	2	1	0	0	1	1	0	-1	1	3
6	-2	-2	-2	-1	-1	-1	-1	-1	-1	0	2	2	3	3	3	2	2	1	1	0	-1	-1	-1	-1	0	3
7	-1	-1	-1	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-3	-3	-4	-4	-4	-5	-5	-6	-6	-3	-1
8	-7	-7	-7	-8	-8	-8	-8	-9	-9	-8	-7	-6	-6	-5	-4	-4	-4	-6	-7	-8	-8	-9	-8	-11	-7	-4
9	-11	-10	-11	-7	-10	-9	-10	-10	-7	-4	-1	-2	-2	-3	-4	-4	-2	-1	-2	-3	-3	-2	-3	-3	-3	-4
10	-7	-8	-7	-7	-8	-7	-8	-7	-7	-4	-4	6	7	8	8	8	7	4	3	2	1	1	1	1	2	8
11	-3	-2	-2	-3	-2	-3	-2	-3	-2	1	4	4	4	5	5	5	4	3	1	0	0	0	-2	-3	0	5
12	-1	-3	-2	-2	-2	-2	-4	-3	-5	-4	3	-1	-1	1	2	2	2	1	1	0	-2	-2	-3	-4	-2	2
13	-3	-4	-4	-4	-5	-6	-6	-5	-3	-1	-2	5	6	6	6	6	6	6	5	3	1	1	1	1	0	6
14	-4	-3	-4	-2	-4	-4	-1	-1	1	2	4	8	10	11	11	11	11	11	7	6	5	5	5	5	0	6
15	0	-1	1	-2	-2	-2	-1	1	2	3	6	8	12	12	13	13	12	11	8	7	7	7	6	6	3	8
16	1	1	1	4	4	3	3	4	4	8	11	12	12	10	9	8	7	6	5	4	4	6	6	6	6	11
17	6	5	4	4	3	3	3	2	3	6	8	8	9	10	9	8	7	6	5	4	7	7	6	6	7	13
18	6	5	4	4	3	3	3	4	4	6	11	12	12	12	13	12	11	9	8	7	7	6	6	6	7	10
19	4	4	4	2	-1	-2	-2	-3	-3	-2	-1	1	3	4	3	3	3	2	2	2	4	4	4	4	4	1
20	-2	-1	1	1	1	1	0	1	1	3	4	6	7	7	7	6	6	4	4	4	1	2	1	1	1	7
21	1	1	1	2	2	2	2	2	3	4	5	6	6	7	7	6	6	3	3	3	3	3	3	3	3	7
22	3	2	0	-1	-1	-2	-2	-2	-1	-1	4	6	7	7	6	5	4	4	4	4	-2	-2	-1	-1	-1	4
23	1	0	0	-2	-2	-2	-1	-2	0	3	6	6	7	7	6	5	4	4	4	4	4	4	4	4	4	2
24	-1	-1	-2	-2	-2	-2	-1	-2	-1	3	6	8	12	12	11	11	9	8	6	5	5	5	5	5	5	8
25	4	4	4	4	3	3	3	2	4	6	7	7	8	8	9	9	8	7	6	5	5	5	5	5	5	9
26	2	3	3	3	2	3	3	2	3	5	6	8	12	12	11	11	9	8	8	8	7	6	6	6	6	12
27	4	4	3	3	3	3	3	3	3	5	6	8	12	12	11	11	9	8	8	8	7	6	6	6	6	9
28	7	6	6	6	5	3	3	3	3	5	6	8	12	12	11	11	9	8	8	8	7	6	6	6	6	12
29	0	-1	-1	-2	-2	-2	-3	-2	-2	1	3	4	6	7	(1M)	7	6	5	4	3	2	2	1	1	1	8
30	1	1	1	1	1	-2	-1	-1	1	4	7	8	9	10	10	9	8	6	4	3	3	3	3	2	4	10
31	2	2	2	0	-1	-1	0	0	3	3	5	7	8	9	9	9	8	7	7	5	3	3	2	1	4	9
AV	1	1	1	0	0	0	0	0	2	2	4	5	5	6	6	6	5	4	3	2	2	1	1	1	2	2
PK	8	-8	-8	8	8	8	7	7	9	9	12	12	12	12	13	12	11	9	10	9	9	8	9	8	8	13
MN	-11	-10	-11	-9	-10	-9	-10	-10	-8	-8	-7	-6	-6	-5	-4	-4	-4	-6	-7	-8	-9	-9	-8	-11	-11	

MONTHLY MINIMUM = -11

TEMPERATURE 100 30M  
DEGREE C

CH-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	7	7	7	6	6	6	4	2	-1	1	1	2	3	3	4	4	4	3	2	2	1	0	2	3	3
2	4	4	4	5	5	5	6	5	6	7	8	10	9	9	9	10	10	8	8	7	6	7	7	7	7
3	8	7	6	6	7	7	6	7	7	8	8	8	11	12	12	12	10	9	10	9	9	9	9	8	9
4	8	8	8	8	8	8	7	7	7	8	8	8	8	9	8	7	6	6	4	3	3	3	1	2	6
5	2	2	1	1	1	2	2	2	2	3	3	3	3	2	3	2	2	1	1	1	1	1	1	0	2
6	-2	-2	-1	-1	-1	-1	-1	-1	-1	0	2	2	2	3	-3	-3	-3	-4	-4	-4	-5	-6	-6	0	0
7	-1	-1	-1	-2	-2	-3	-3	-3	-3	-4	-8	-7	-6	-6	-5	-4	-4	-4	-6	-6	-8	-8	-7	-9	-3
8	-7	-7	-8	-9	-9	-9	-10	-9	-9	-8	-7	-7	-6	-5	-4	-4	-4	-6	-5	-6	-8	-7	-7	-7	-4
9	-10	-9	-10	-9	-6	-6	-6	-6	-6	-4	-1	1	2	2	3	2	2	1	-1	-1	-2	-1	-2	-1	-2
10	-6	-7	-6	-6	-1	-2	-1	-2	0	1	4	6	7	8	8	8	7	6	4	3	3	2	1	-2	2
11	-2	-1	-1	-2	-1	-2	-2	-2	-2	-1	2	4	3	4	4	4	4	3	2	1	0	1	-1	-2	1
12	1	-2	-1	-1	-2	-4	-2	-4	-4	-4	-3	-2	-1	1	1	5	2	1	3	2	-1	-1	-2	-3	-2
13	-3	-3	-3	-3	-3	-2	-4	-2	-2	-1	4	5	6	6	6	6	6	4	3	2	2	3	3	3	-2
14	-4	-3	-3	1	-1	-2	1	2	2	2	4	5	6	7	7	7	7	6	6	4	2	2	2	3	3
15	2	1	2	2	3	3	3	3	3	4	6	8	10	11	11	11	11	9	8	7	7	6	7	7	6
16	2	3	2	6	6	6	6	6	6	6	11	11	12	12	12	12	12	8	6	5	6	6	6	6	8
17	7	7	6	4	4	4	3	3	3	4	8	8	9	9	9	9	9	6	6	5	2	2	2	2	6
18	6	5	5	4	4	4	3	3	3	3	6	6	6	6	6	6	6	4	3	2	2	2	2	2	1
19	6	5	4	3	1	-2	-2	-3	-3	-2	-1	1	2	4	3	3	3	3	3	3	2	2	2	2	1
20	0	1	2	2	2	2	2	2	2	3	4	6	6	7	7	6	6	4	4	4	4	4	4	4	1
21	2	2	2	2	2	2	2	2	3	4	4	6	6	6	6	5	4	4	4	4	4	3	3	3	3
22	3	0	0	1	-1	-2	-2	-2	-1	-1	0	1	1	1	1	1	1	0	-1	-1	-2	-2	0	1	0
23	1	-1	-1	-1	-1	-1	-1	-1	-1	2	4	4	4	4	4	4	4	3	3	3	4	4	4	4	2
24	4	4	4	4	3	3	3	3	3	4	6	7	7	8	8	7	6	6	6	6	6	6	6	5	8
25	3	3	3	3	3	2	3	3	3	4	6	8	8	9	9	9	8	8	7	7	7	7	6	5	6
26	3	6	5	5	5	4	3	3	4	5	6	7	8	8	11	11	9	9	8	8	7	7	6	5	8
27	7	7	7	6	6	4	3	3	4	5	6	7	8	8	8	8	7	6	4	3	3	2	2	1	5
28	1	0	-1	-1	-1	-2	-2	-2	-2	0	2	4	6	7	7	7	7	6	3	3	3	3	2	3	2
29	2	2	2	2	2	3	2	2	2	4	7	8	9	10	9	9	8	6	5	4	4	4	4	3	5
30	2	3	3	1	1	-1	1	1	1	3	5	7	8	9	9	9	8	6	7	6	4	4	3	3	5
31	3	3	3	1	1	-1	1	1	1	3	5	7	8	9	9	9	8	8	7	6	4	3	3	2	4
AV	2	1	1	1	1	1	0	0	1	2	3	4	5	6	6	6	5	4	3	3	2	2	2	2	3
PR	8	8	8	8	8	8	7	7	7	9	11	12	12	12	12	12	11	9	10	9	9	9	9	8	3
MIN	-10	-9	-10	-9	-9	-9	-10	-9	-9	-8	-8	-7	-6	-6	-5	-4	-4	-6	-6	-6	-8	-8	-7	-9	12

MONTHLY MINIMUM = -10

TEMPERATURE IN 60M  
DEGREE C

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1	7	7	7	6	6	6	4	2	-1	1	7	2	3	3	4	4	4	3	2	2	1	1	2	3	3	7	
2	4	4	6	6	7	7	5	5	6	7	10	8	11	9	11	11	10	8	9	6	6	9	7	7	8	6	
3	6	6	6	7	7	7	7	7	7	8	8	8	8	8	8	7	6	6	10	9	9	9	8	8	8	11	
4	6	2	1	1	1	2	2	2	2	3	3	3	2	2	3	2	2	1	1	1	1	1	1	2	3	8	
5	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	2	3	2	2	3	2	2	1	1	1	1	0	0	0	0	2	3
6	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	7	
7	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
8	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
9	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
10	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
11	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
12	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
13	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
14	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
15	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
16	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
17	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
18	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
19	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
20	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
21	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
22	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
23	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
24	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
25	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
26	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
27	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
28	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
29	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
30	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
31	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-4	-5	-5	-5	-6	-6	-7	-7	6	
AV	2	2	2	1	1	1	1	1	1	2	3	4	5	5	5	5	5	4	3	3	3	3	2	2	3	3	
PK	6	6	6	7	7	7	7	7	8	9	11	12	12	12	12	11	11	10	10	9	9	9	8	8	8	12	
MIN	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-7	-7	-6	-5	-5	-5	-5	-4	-3	-3	-3	-3	-2	-2	-3	5	

MONTHLY MINIMUM = -10



C-B TRACT  
MRI AD42  
DEC 1980

TEMPERATURE @10M

DATA NOT AVAILABLE AT REPORT TIME

TEMPERATURE @10M

C-B TRACT  
MRI AD56  
DEC 1980

DATA NOT AVAILABLE AT REPORT TIME

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE	PEAK		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	1	1	0	0	1		
2	0	0	0	0	-1	0	0	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	-1	-1	-1	-1	0		
3	-1	0	0	-1	-1	0	-1	0	0	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	-44	6	-78	0	-55	0		
4	-39	-39	-33	-33	-39	-44	-33	-22	-50	-83	-94	-89	-100	-100	-89	-83	-56	-67	-61	-56	11	44	44	44	44	-27	67	
5	67	-17	-61	-39	6	17	-6	-44	-28	-72	-78	-89	-83	-100	-83	-83	-61	-17	-28	11	44	11	44	44	44	-27	67	
6	72	94	72	11	-6	-11	6	-50	-22	-44	-56	-72	-89	-89	-94	-83	-72	-50	-33	-11	22	28	0	33	-19	94	6	
7	-6	-22	-17	17	44	-11	-44	-61	-56	-28	-50	-78	-83	-83	-83	-78	-72	-83	-78	-78	-72	-83	-83	-83	-53	44	7	
8	-89	-89	-83	-89	-89	-89	-89	-89	-89	-94	-83	-89	-89	-89	-89	-78	-50	17	44	106	117	28	0	156	-41	156	8	
9	61	72	73	61	94	17	0	-39	-33	-89	-89	-94	-100	-83	-89	-83	-61	28	44	194	94	150	183	133	19	194	9	
10	61	161	28	61	150	78	100	150	122	56	-56	-67	-72	-67	-72	-72	-22	144	178	150	172	183	144	161	70	183	10	
11	156	178	128	161	122	200	161	217	206	61	-56	-56	-67	-56	-61	-56	-39	28	78	94	194	150	89	167	83	217	11	
12	206	217	94	89	183	128	250	161	128	83	-56	-72	-67	-72	-61	-61	-17	17	72	56	33	39	228	106	70	256	12	
13	89	183	122	78	89	111	50	33	94	-22	-94	-94	-89	-83	-83	-78	-56	-11	28	122	122	172	222	217	48	222	13	
14	122	44	200	122	128	172	94	122	239	67	-50	-67	-50	-72	-67	-56	-17	33	56	61	128	128	128	150	67	239	14	
15	211	128	128	250	172	217	139	72	94	44	-56	-72	-72	-72	-72	-67	-44	0	17	144	122	56	122	206	69	250	15	
16	211	189	139	206	189	150	200	194	206	133	-39	-44	-50	-67	-61	-61	-11	117	111	94	178	144	250	189	107	250	16	
17	206	139	144	106	128	217	206	167	217	94	-72	-78	-83	-89	-72	-67	6	-6	-17	-17	-17	-17	0	-11	45	217	17	
18	-22	-11	0	39	44	67	78	100	33	-67	-78	-83	-78	-78	-83	-67	-33	-22	-6	44	56	0	-11	-17	-8	100	18	
19	17	11	39	178	256	111	-22	-11	-39	-39	-39	-83	-83	-78	-17	-56	-33	6	6	6	78	83	56	150	21	256	19	
20	211	144	144	56	72	56	106	44	67	0	-67	-83	-89	-89	-94	-78	-28	61	44	22	0	22	78	22	26	211	20	
21	21	89	78	61	39	-22	-17	28	17	-61	-78	-89	-89	-89	-94	-83	-39	0	-17	-39	-33	-39	-56	-56	-21	89	21	
22	-72	-61	-67	-67	-56	-56	-56	-56	-67	-83	-89	-94	-94	-83	-78	-56	-39	-17	-28	-44	-44	-33	-61	-67	-60	-17	22	
23	-44	-39	0	44	11	22	-61	-33	-28	-56	-72	-72	-61	-61	-56	-61	-11	67	117	83	28	44	89	122	-1	122	23	
24	56	-11	28	72	39	78	17	56	22	-61	-83	-78	-83	-78	-72	-56	-44	-50	-44	-50	-39	-44	-44	-33	-21	78	24	
25	-39	-33	-28	-28	-22	11	22	-6	-50	-72	-72	-89	-83	-78	-72	-44	-11	28	39	117	217	144	239	111	61	239	25	
26	128	56	43	78	94	101	183	106	39	-67	-72	-78	-83	-78	-72	-44	-6	56	128	128	117	217	239	111	61	194	26	
27	139	167	161	183	144	194	117	117	89	-6	-72	-78	-72	-78	-67	-61	-22	-17	22	0	33	83	106	56	47	194	27	
28	17	0	-11	28	78	117	72	39	50	-22	-33	-78	-83	-83	-72	-50	-6	17	39	44	67	50	61	78	13	117	28	
29	61	28	67	78	56	72	94	39	89	-56	-72	-72	-72	-72	(1M)	-67	-17	89	72	0	67	239	189	111	40	239	29	
30	128	117	72	94	106	89	128	89	139	-17	-78	-78	-72	-72	-78	-89	-39	28	167	139	133	144	144	72	53	167	30	
31	1	1	1	2	2	1	1	1	2	0	0	-1	-1	-1	-1	-1	0	0	0	1	2	1	1	2	1	2	31	
AV	64	54	48	58	66	66	55	43	45	-16	-59	-68	-68	-68	-65	-58	-29	13	31	41	56	56	68	69	17	256	32	
PR	211	217	200	250	256	217	256	217	239	133	0	-1	-1	-1	-1	-1	6	144	178	194	217	239	250	217	17	256	33	
44	-84	-89	-83	-84	-89	-89	-89	-89	-89	-94	-94	-94	-100	-100	-100	-89	-72	-83	-78	-78	-78	-72	-83	-83	-83	17	256	34

MONTHLY MINIMUM = -100

RELATIVE HUMIDITY @ 3M  
PERCENT

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	29	29	20	26	27	29	29	30	34	50	62	59	59	48	42	40	35	36	43	52	58	62	67	73	44	73
2	70	57	50	49	46	39	36	34	32	30	25	22	20	18	18	18	19	19	24	28	29	32	32	32	33	70
3	31	30	28	29	30	30	31	32	47	46	38	31	30	32	31	27	26	24	27	28	28	29	29	28	31	47
4	28	29	29	27	27	28	27	27	27	26	26	22	21	22	21	22	24	27	33	39	47	60	67	73	32	73
5	92	92	92	92	92	93	93	87	86	81	74	59	59	60	78	62	69	74	80	91	92	91	90	87	82	93
6	89	94	94	95	95	96	96	96	96	95	92	64	60	52	46	47	47	48	56	62	67	74	83	83	76	96
7	83	83	87	89	89	91	93	93	93	93	93	93	92	91	90	91	91	91	91	92	92	92	92	92	91	93
8	92	92	92	91	91	90	89	89	89	89	86	69	60	62	62	59	54	54	69	80	85	88	89	89	80	92
9	89	89	89	89	91	92	92	92	92	92	75	61	59	57	49	44	45	51	67	80	85	89	89	89	77	92
10	87	81	79	81	79	81	85	87	86	83	76	45	35	30	26	27	31	35	50	56	62	63	63	62	62	87
11	62	61	59	57	57	55	55	54	53	51	43	31	25	22	21	19	18	18	26	40	45	46	49	48	42	62
12	48	50	50	54	49	49	49	51	55	45	35	28	26	27	25	28	29	30	39	53	57	57	62	62	44	62
13	64	63	65	65	65	67	68	69	69	68	58	47	45	44	38	35	34	35	42	54	59	59	60	59	56	69
14	61	62	62	65	66	68	70	75	76	72	58	50	43	35	32	30	31	31	33	55	65	69	70	64	56	76
15	59	58	59	58	59	60	60	62	68	67	57	52	48	45	42	40	41	44	56	72	80	85	88	89	60	89
16	89	89	91	92	92	92	92	92	92	92	77	55	43	36	31	31	31	32	44	56	62	67	69	69	67	92
17	70	70	69	69	69	70	72	72	72	65	55	35	31	29	28	27	27	33	37	40	43	45	46	50	51	72
18	52	54	55	61	62	65	67	68	75	75	60	48	44	40	36	36	41	48	50	54	57	62	63	62	56	75
19	63	66	76	83	86	90	93	94	94	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	73	84	88	91	92	92	( )	94
20	93	93	93	92	92	92	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	93
21	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
22	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
23	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
24	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
25	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
26	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
27	77	80	80	80	80	80	80	79	75	69	48	48	45	42	42	39	41	47	56	62	66	70	73	76	( )	76
28	52	53	53	53	53	53	60	64	69	72	61	44	36	34	33	33	31	29	29	31	34	36	41	46	54	80
29	91	92	93	93	93	93	93	93	93	93	88	65	52	39	31	25	20	22	31	48	54	58	62	64	66	93
30	60	61	59	60	59	59	59	56	53	54	51	30	31	19	17	17	20	25	34	43	50	51	54	54	45	61
31	51	52	54	53	50	51	54	54	54	48	42	34	30	30	30	30	33	37	49	59	65	69	72	78	49	78
AV	67	67	67	68	68	69	68	69	70	67	60	48	43	40	38	36	37	39	48	57	62	65	68	68	57	96
PK	93	94	94	95	95	96	96	96	96	95	93	93	92	91	90	91	91	91	91	92	92	92	92	92	92	96
MN	28	29	26	26	27	28	27	27	27	26	25	22	20	18	17	17	18	18	24	28	28	29	29	29	28	

MONTHLY MINIMUM = 17



SOLAR RADIATION  
LANGLEY

CB-TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL	PEAK	
1	0	0	0	0	0	0	0	4	16	23	19	40	40	33	15	4	0	0	0	0	0	0	0	0	194	40	
2	0	0	0	0	0	0	0	3	15	24	18	35	22	24	20	12	2	0	0	0	0	0	0	0	175	35	
3	0	0	0	0	0	0	0	1	13	26	29	11	18	24	26	14	3	0	0	0	0	0	0	0	165	29	
4	0	0	0	0	0	0	0	0	5	19	22	22	27	21	14	7	0	0	0	0	0	0	0	0	136	27	
5	0	0	0	0	0	0	0	0	7	11	9	16	7	9	18	5	0	0	0	0	0	0	0	0	83	18	
6	0	0	0	0	0	0	0	0	4	11	25	16	25	22	16	8	1	0	0	0	0	0	0	0	127	25	
7	0	0	0	0	0	0	0	0	0	2	4	5	4	3	3	1	0	0	0	0	0	0	0	0	23	5	
8	0	0	0	0	0	0	0	0	1	5	9	9	7	6	5	3	0	0	0	0	0	0	0	0	45	9	
9	0	0	0	0	0	0	0	0	4	7	10	9	12	10	7	4	0	0	0	0	0	0	0	0	63	12	
10	0	0	0	0	0	0	0	0	3	9	17	25	26	21	13	8	0	0	0	0	0	0	0	0	122	26	
11	0	0	0	0	0	0	0	0	7	15	21	23	24	21	15	7	0	0	0	0	0	0	0	0	132	24	
12	0	0	0	0	0	0	0	0	7	14	21	24	20	19	11	8	1	0	0	0	0	0	0	0	125	24	
13	0	0	0	0	0	0	0	0	6	14	21	24	25	22	16	7	0	0	0	0	0	0	0	0	136	25	
14	0	0	0	0	0	0	0	0	7	14	21	24	23	21	14	7	1	0	0	0	0	0	0	0	132	24	
15	0	0	0	0	0	0	0	0	6	12	18	21	23	21	15	7	0	0	0	0	0	0	0	0	123	23	
16	0	0	0	0	0	0	0	0	4	13	20	23	22	16	14	6	1	0	0	0	0	0	0	0	118	23	
17	0	0	0	0	0	0	0	0	7	14	20	23	24	21	15	7	1	0	0	0	0	0	0	0	132	24	
18	0	0	0	0	0	0	0	0	6	14	20	23	23	19	11	4	1	0	0	0	0	0	0	0	121	23	
19	0	0	0	0	0	0	0	0	9	7	12	13	19	15	8	4	0	0	0	0	0	0	0	0	88	19	
20	0	0	0	0	0	0	0	0	9	15	19	23	23	16	13	7	1	0	0	0	0	0	0	0	125	23	
21	0	0	0	0	0	0	0	0	4	8	19	23	21	21	14	2	0	0	0	0	0	0	0	0	110	23	
22	0	0	0	0	0	0	0	0	8	15	21	22	20	12	5	2	0	0	0	0	0	0	0	0	106	22	
23	0	0	0	0	0	0	0	0	3	5	20	17	17	8	8	3	0	0	0	0	0	0	0	0	82	20	
24	0	0	0	0	0	0	0	0	3	8	16	22	14	16	8	3	0	0	0	0	0	0	0	0	111	22	
25	0	0	0	0	0	0	0	0	4	12	17	21	22	19	5	2	0	0	0	0	0	0	0	0	103	22	
26	0	0	0	0	0	0	0	0	10	17	21	24	19	17	10	3	0	0	0	0	0	0	0	0	124	24	
27	0	0	0	0	0	0	0	0	9	14	17	22	19	15	7	2	0	0	0	0	0	0	0	0	107	22	
28	0	0	0	0	0	0	0	0	3	16	15	20	20	14	8	4	0	0	0	0	0	0	0	0	107	20	
29	0	0	0	0	0	0	0	7	19	26	23	24	23	19	7	8	1	0	0	0	0	0	0	0	156	26	
30	0	0	0	0	0	0	0	0	5	14	20	23	24	21	15	9	1	0	0	0	0	0	0	0	131	24	
31	0	0	0	0	0	0	0	0	6	13	19	23	24	22	17	9	1	0	0	0	0	0	0	0	134	24	
TL	0	0	0	0	0	0	0	33	220	424	567	647	634	546	370	178	18	0	0	0	0	0	0	0	0	3638	40
PK	0	0	0	0	0	0	0	7	19	26	29	40	40	33	26	14	3	0	0	0	0	0	0	0	0	0	0

BAROMETRIC PRESSURE  
MILLIBARS

CB-TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	775	775	775	775	775	776	777	778	778	779	781	781	781	781	781	781	782	782	782	783	783	783	783	783	780	783
2	783	782	782	782	781	782	782	782	783	782	782	782	782	782	781	781	781	781	781	781	782	782	782	782	782	783
3	783	782	783	783	783	783	783	783	783	783	783	782	782	782	781	781	780	780	780	780	780	780	781	781	782	783
4	781	781	781	780	780	780	780	780	780	780	780	779	778	778	778	778	778	778	779	779	779	779	779	779	779	781
5	779	779	778	779	779	778	779	779	779	779	779	779	779	779	779	778	778	778	778	778	778	778	778	778	779	779
6	779	779	779	779	779	779	779	779	779	779	779	779	779	779	779	778	778	778	778	778	778	778	778	778	779	779
7	779	779	779	779	779	779	779	779	779	779	779	779	779	779	779	778	778	778	778	778	778	778	778	778	779	779
8	785	785	785	785	785	785	786	786	786	786	786	786	786	786	785	785	785	785	785	785	785	785	785	785	781	785
9	785	786	786	786	786	787	787	788	788	788	789	789	789	789	789	789	790	790	790	790	791	792	792	793	785	786
10	792	792	793	793	793	793	793	793	793	794	794	794	794	794	793	793	793	793	793	793	793	793	793	793	789	793
11	793	793	793	793	793	793	793	793	793	794	794	794	794	794	793	793	793	793	793	793	793	793	793	793	793	794
12	791	791	791	790	790	790	789	789	789	789	789	789	789	788	788	788	788	788	788	788	788	789	789	789	789	791
13	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	790	791
14	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791
15	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792
16	794	794	794	794	794	794	794	794	794	794	794	794	794	794	793	793	792	792	792	792	792	792	792	792	792	792
17	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790	790
18	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785
19	784	784	784	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785
20	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788
21	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786	786
22	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785
23	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785
24	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791
25	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789
26	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792
27	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792	792
28	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789
29	793	793	793	793	793	794	794	794	794	794	794	794	794	794	794	794	793	793	793	793	793	793	793	793	793	793
30	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793
31	790	790	790	790	790	790	790	790	790	790	790	790	789	789	788	788	788	788	788	788	789	789	789	789	789	790

MONTHLY MINIMUM = 775

AV	787	787	787	787	787	787	787	788	788	788	788	788	788	787	787	787	787	787	787	787	787	787	787	787	787	787
PE	794	794	794	794	794	794	794	795	795	796	796	795	794	794	793	793	793	793	794	794	794	794	794	794	794	796
MAX	775	775	775	775	775	776	777	778	778	779	779	779	778	778	778	778	778	778	778	778	778	778	778	778	778	778

PRECIPITATION  
CM\*100

CB-TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								TL PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1																									( )
2																									( )
3																									( )
4																									( )
5		8	3 (TR)	(TR)	3	3																			13
6					3	8		8	5																23
7					3		5	5	3																15
8																									( )
9																									( )
10																									( )
11																									( )
12																									( )
13																									( )
14																									( )
15																									( )
16																									( )
17																									( )
18																									( )
19																									( )
20																									( )
21																									( )
22																									( )
23						23	8 (TR)	(TR)	5																36
24																									( )
25																									( )
26																									( )
27																									( )
28																									( )
29																									( )
30																									( )
31																									( )
TL ( )		8	3 ( )	( )	5	33	13	13	8	5 ( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	86
PK		8	3		3	23	8	8	5	5															23

PRECIPITATION  
CM-100

CB-TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

		HOUR (LOCAL STANDARD TIME)																									
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL	PEAK
1																										( )	
2																										( )	
3																										( )	
4																										( )	
5		5																								5	5
6					3 (TR)	(TR)		3	8																	15	8
7					5	8		5	8			15 (TR)	3													43	15
8																										( )	
9																										( )	
10																										( )	
11																										( )	
12																										( )	
13																										( )	
14																										( )	
15																										( )	
16																										( )	
17																										( )	
18	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	( )	
19																										( )	
20																										( )	
21																										( )	
22						15	13 (TR)	(TR)					3													30	15
23																										( )	
24																										( )	
25																										( )	
26																										( )	
27																										( )	
28																										( )	
29																										( )	
30																										( )	
31																										( )	
TL	( )		5 ( )	3	20	20	20	8	10	8 ( )		15	3	3 ( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	94	
PK			5	3	15	13	5	8	8	8		15	3	3													15



C-B TRACT  
TRAILER AB23  
DEC 1980

EVAPORATION

NOT OPERATIONAL

INVERSION HEIGHT  
METERS

CB-TRACT  
TRAILER AC20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	200	200	205	240	330	305	300	310	270	280	220	(NV)	(NV)	(NV)	(NV)	(NV)	40	205	330	280	300	360	335	400	269	400
2	370	390	320	305	350	380	315	350	260	40	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	105	190	115	100	70	70	90	225	390
3	280	290	260	290	300	600	540	490	215	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	200	330	400	305	300	310	320	200	331	600
4	190	160	215	300	305	280	250	290	270	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	100	240	405	540	400	510	510	310	540
5	330	400	400	390	550	500	370	310	390	280	(NV)	(NV)	(NV)	(NV)	170	295	130	270	460	540	450	320	480	510	377	550
6	420	500	430	400	505	420	230	215	80	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	45	105	160	225	340	300	410	390	304	505
7	390	370	380	395	220	205	270	250	115	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	160	310	500	550	505	500	420	330	345	550
8	190	370	440	520	505	470	400	80	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	130	190	(IM)	(IM)	(IM)	(IM)	300	320	326	520
9	315	290	340	300	260	270	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	340
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
11	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
14	390	390	400	460	450	470	415	430	400	390	320	295	190	(NV)	(NV)	(NV)	190	300	370	330	380	400	400	410	370	470
15	380	370	400	425	405	410	380	305	295	270	260	200	40	(NV)	(NV)	(NV)	110	240	370	400	370	400	405	420	326	425
16	430	430	400	400	405	405	400	405	400	400	330	200	(NV)	(NV)	(NV)	(NV)	190	350	460	500	460	500	505	510	404	510
17	540	540	540	580	590	560	590	550	550	460	280	(NV)	(NV)	(NV)	(NV)	(NV)	480	570	630	690	700	695	640	530	564	700
18	550	520	505	530	505	520	610	700	630	390	70	(NV)	(NV)	(NV)	(NV)	(NV)	40	100	190	300	410	510	510	380	419	700
19	380	320	310	320	310	315	405	490	490	480	430	400	415	360	340	340	280	300	320	405	490	480	405	370	381	490
20	410	400	390	450	460	415	400	420	490	470	450	350	190	(NV)	(NV)	(NV)	120	230	300	380	390	430	450	460	384	490
21	500	500	490	500	520	500	450	490	520	405	200	(NV)	(NV)	(NV)	(NV)	(NV)	60	310	500	600	630	510	480	450	453	630
22	440	510	580	580	530	600	700	600	390	110	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	280	500	605	660	680	660	530	250	511	700
23	400	520	450	420	410	300	110	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	280	290	390	450	490	490	480	400	376	520
24	480	410	460	470	410	400	410	430	420	310	280	40	(NV)	(NV)	(NV)	70	280	380	450	490	480	410	360	310	369	490
25	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
26	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	50	140	250	380	420	460	500	490	( )	500
27	480	500	505	600	700	680	640	680	540	410	400	300	90	(NV)	(NV)	40	150	210	300	370	500	540	550	560	443	700
28	420	420	390	400	450	410	430	530	520	420	270	(NV)	(NV)	(NV)	(NV)	(NV)	210	410	490	500	450	490	450	400	424	530
29	470	450	500	450	460	500	530	570	490	340	190	(NV)	(NV)	(NV)	(NV)	30	230	430	480	400	390	405	440	450	410	570
30	330	360	310	350	390	310	280	270	270	250	90	(NV)	(NV)	(NV)	(NV)	(NV)	160	310	390	400	405	400	390	400	319	405
31	420	400	410	410	400	420	450	400	310	180	60	(NV)	(NV)	(NV)	100	320	450	470	420	450	440	410	420	420	370	470
AV	388	400	401	419	429	426	411	416	378	327	257	( )	( )	( )	( )	( )	184	288	385	419	440	432	426	396	376	
PK	550	540	580	600	700	680	700	700	630	480	450	400	415	360	340	340	480	570	630	690	700	695	640	560		700

STABILITY CLASS # 50M  
0=STB 1=UNST

CB-TRACT  
TRAILER AC20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	(IM)	(IM)	(IM)	(IM)	0	0	0
9	0	0	0	0	0	0	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	0	( )
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	( )
11	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	( )
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	( )
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	( )
14	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0
25	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	( )
26	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	( )
27	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
PV	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0

STABILITY CLASS # 200M  
0=STB 1=UNST

CB-TRACT  
TRAILER AC20  
DEC 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								PREV
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
4	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
8	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)
11	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)
14	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
25	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)
26	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)
27	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
PV	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0



STABILITY CLASS USING DT/DZ  
DT 60-10M  
WS 10M

CB-TRACT  
TRAILER AA23  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

		HOUR (LOCAL STANDARD TIME)																									
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	
1	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	(	
2	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
3	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
4	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
5	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
6	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
7	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
8	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	
9	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
10	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
11	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
12	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
13	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
14	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
15	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
16	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
17	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
18	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
19	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
20	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
21	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
22	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
23	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
24	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
25	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
26	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
27	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
28	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
29	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
30	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	
31	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	
AVE	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	

TOTAL OCCURRENCES: A= 2 B= 30 C= 61 D=219 E=242 F=182 HOURS MISSING= 8

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

NITRIC OXIDE (NO)

PERIOD(12/01/80 TO 12/31/80)

TRAILER AB20

CONCENTRATION MAX UG/M <sup>3</sup>	WIND DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
GT 130. :	2	2	7	3	7	3	3	3	4	2	2	2	2	4	3	2	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	2	6	8	16	89	225	163	15	42	17	14	4	60	58	19	6	744
TOTAL :	2	6	8	16	89	225	163	15	42	17	14	4	60	58	19	6	744
MEAN CONC.	1	2	3	1	2	2	1	1	2	1	1	2	1	2	2	2	2

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

NITRIC OXIDE (NO)

		PERIOD(12/01/80 TO 12/31/80)																											
		TRAILER		AB23		WIND DIRECTION																							
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL										
CONCENTRATION		0	0	0	0	0	17	1	0	0	0	2	0	3	1	1	11	0											
MAX		.....																											
UG/M**3		.....																											
GT 130. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
120. - 130. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
110. - 120. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
100. - 110. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
90. - 100. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
80. - 90. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
70. - 80. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
60. - 70. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
50. - 60. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
40. - 50. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
30. - 40. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
20. - 30. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
10. - 20. :		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2										
LT 10. :		15	4	6	13	19	47	48	62	93	123	129	28	31	49	50	24	1	742										
TOTAL :		15	4	6	13	19	48	48	62	93	123	129	28	31	49	50	25	1	744										
		.....																											
MEAN		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0										
CONC.		.....																											

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

OXIDES OF NITROGEN (NOX)

PERIOD(12/01/80 TO 12/31/80)

TRAILER AB20

CONCENTRATION MAX UG/M**3	WIND DIRECTION																TOTAL
	N	NNE	NE	ESE	E	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	
GT 130. :	7	7	20	13	20	16	11	13	7	7	7	11	11	11	7	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
10. - 20. :	0	0	1	1	8	19	3	1	4	0	0	1	3	2	0	0	43
LT 10. :	2	6	6	15	80	206	160	14	38	17	14	4	59	55	17	6	699
TOTAL :	2	6	8	16	89	225	163	15	42	17	14	4	60	58	19	6	744
MEAN CONC.	6	5	9	4	7	6	5	6	6	5	5	4	5	5	6	5	6

0 = NO OBSERVATIONS



NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

OXIDES OF NITROGEN (NOX)

		PERIOD(12/01/80 TO 12/31/80)																TOTAL	
		TRAILER		AB23		WIND DIRECTION													
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
CONCENTRATION	MAX	22	13	5	37	16	31	47	16	33	18	43	30	50	28	28	37	0	
UG/M <sup>3</sup>																			
GT 130. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
120. - 130. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
110. - 120. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
100. - 110. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
90. - 100. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
80. - 90. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
70. - 80. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
60. - 70. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
50. - 60. :		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0 :	1
40. - 50. :		0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0 :	2
30. - 40. :		0	0	0	2	0	1	0	0	1	0	1	1	0	0	0	2	0 :	8
20. - 30. :		1	0	0	0	0	1	1	0	0	0	1	0	0	1	1	3	0 :	9
10. - 20. :		0	1	0	0	1	3	3	1	2	1	3	3	4	2	5	5	0 :	34
LT 10. :		14	3	6	11	18	43	43	61	90	122	123	24	26	46	44	15	1 :	690
TOTAL :		15	4	6	13	19	48	48	62	93	123	129	28	31	49	50	25	1	744
MEAN CONC.		5	5	0	7	3	4	4	2	2	1	2	5	5	2	4	11	0	3

0 = NO OBSERVATIONS



NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

NITROGEN DIOXIDE (NO2)

PERIOD(12/01/80 TO 12/31/80)

TRAILER AB23

CONCENTRATION MAX UG/M**3	WIND DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
22	13	5	37	5	26	20	16	33	18	43	30	45	28	28	20	0	
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	14	3	6	11	19	44	44	61	90	122	126	24	26	48	45	18	1
TOTAL :	15	4	6	13	19	48	48	62	93	123	129	28	31	49	50	25	1
MEAN CONC.	4	5	0	7	1	3	3	2	2	1	2	5	4	2	4	8	0

0 = NO OBSERVATIONS

## C-B SHALE OIL PROJECT

OZONE (03)

PERIOD(12/01/80 TO 12/31/80)

TRAILER AB20

WIND DIRECTION

TOTAL

CONCENTRATION

MAX

UG/M#3

19

240. - 20

220. - 24

200. - 21

180. - 20

160. - 14

140. - 141.

120. - 1

100-1

90-1

53

5

MEAN

01/10)

(01/16/81-RPI)



NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

OZONE (03)

C-B SHALE OIL PROJECT

TRAILER AB23 PERIOD(12/01/80 TO 12/31/80)

CONCENTRATION MAX UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	WIND DIRECTION								WNW	NW	NNW	CALM	TOTAL
									S	SSW	SW	WSW	W	WNW	NW	NNW					
76	74	84	84	80	82	82	84	84	86	96	92	80	80	78	82	82	68	68			
GT 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
240. - 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220. - 240. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200. - 220. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180. - 200. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160. - 180. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140. - 160. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 140. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 100. :	0	0	2	1	2	2	4	2	4	16	21	1	1	0	2	2	0	0	0	0	60
60. - 80. :	10	3	4	7	12	29	35	49	71	83	82	13	22	29	34	13	1	1	1	497	
40. - 60. :	4	1	0	2	5	16	8	9	16	23	22	12	6	15	12	8	0	0	0	159	
20. - 40. :	1	0	0	3	0	1	0	2	0	0	1	1	0	3	1	2	0	0	0	15	
LT 20. :	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	4	
TOTAL :	15	4	6	13	19	48	47	62	92	122	127	27	30	47	50	25	1	1	1	735	
MEAN CONC.	62	65	75	58	67	63	66	68	67	69	68	60	63	61	63	60	68	68	66		

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

CARBON MONOXIDE (CO)

C-B SHALE OIL PROJECT

PERIOD(12/01/80 TO 12/31/80)

TRAILER AB20

WIND DIRECTION

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
CONCENTRATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MAX																		
UG/M**3																		
GT 4000. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3750. -4000. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3500. -3750. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3250. -3500. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3000. -3250. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2750. -3000. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2500. -2750. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2250. -2500. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000. -2250. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1750. -2000. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500. -1750. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1250. -1500. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000. -1250. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 1000. :	2	6	8	16	89	225	163	15	42	17	14	4	60	58	19	6	0	744
TOTAL :	2	6	8	16	89	225	163	15	42	17	14	4	60	58	19	6	0	744
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONC.																		

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

CARBON MONOXIDE (CO)

PERIOD(12/01/80 TO 12/31/80)

TRAILER AB23

CONCENTRATION MAX UG/M**3	WIND DIRECTION																NNW	NW	NNW	CALM	TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
114	0	0	0	229	229	229	229	229	114	344	229	0	114	114	344	114	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

HYDROGEN SULFIDE (H2S)

TRAILER AB23 PERIOD(12/01/80 TO 12/31/80)

CONCENTRATION MAX UG/M**3	WIND DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		CALM
GT 130. :	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
LT 10. :	15	4	6	13	19	48	48	62	91	123	129	28	31	49	50	25	1	742
TOTAL :	15	4	6	13	19	48	48	62	92	123	129	28	31	49	50	25	1	743
MEAN CONC.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = NO OBSERVATIONS



FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

10 METER LEVEL

STATION AB20 PERIOD(12/01/80 TO 12/31/80)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. - 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. - 8. :	0	0	0	0	0	0	1	0	3	0	0	0	0	1	0	0	0	5
3. - 5. :	0	0	0	6	2	7	58	4	14	3	2	0	19	6	1	0	0	122
1. - 3. :	0	2	1	4	39	156	83	8	20	8	9	1	29	34	9	2	0	405
LT 1. :	2	4	7	6	48	62	21	3	5	6	3	3	12	17	9	4	0	212
TOTAL :	2	6	8	16	89	225	163	15	42	17	14	4	60	58	19	6	0	744
PERCFNT	0.	1.	1.	2.	12.	30.	22.	2.	6.	2.	2.	1.	8.	8.	3.	1.	0.	100.

0 = NO OBSERVATIONS

(01/16/81-RPI)

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

SULFUR DIOXIDE (SO2)

PERIOD(12/01/80 TO 12/31/80)

TRAILER AB20

CONCENTRATION MAX UG/M**3	WIND DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
GT 130. :	5	5	15	7	15	7	7	7	7	5	5	5	7	10	7	5	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	2	0	5	0	0	0	0	0	0	0	0	1	0	0	8
LT 10. :	2	6	6	16	84	225	163	15	42	17	14	4	60	57	19	6	736
TOTAL :	2	6	8	16	89	225	163	15	42	17	14	4	60	58	19	6	744
MEAN CONC.	5	4	6	3	5	4	4	4	4	4	4	4	4	4	4	4	4

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

SULFUR DIOXIDE (SO2) C-B SHALE OIL PROJECT

		PERIOD(12/01/80 TO 12/31/80)																													
		TRAILER		AB23		WIND DIRECTION																									
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL												
CONCENTRATION		7	7	7	7	10	10	13	10	13	13	13	0	10	10	10	10	0													
MAX		7	7	7	7	10	10	13	10	13	13	13	0	10	10	10	10	0													
UG/M <sup>3</sup>		7	7	7	7	10	10	13	10	13	13	13	0	10	10	10	10	0													
.....																															
GT 130. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
120. - 130. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
110. - 120. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
100. - 110. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
90. - 100. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
80. - 90. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
70. - 80. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
60. - 70. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
50. - 60. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
40. - 50. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
30. - 40. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
20. - 30. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
10. - 20. :		0	0	0	0	1	2	5	10	16	26	24	0	2	2	1	1	0	0												
LT 10. :	15	4	6	13	18	46	43	52	77	93	104	28	29	47	49	24	1	1	0												
TOTAL :	15	4	6	13	19	48	48	62	93	119	128	28	31	49	50	25	1	739													
.....																															
MEAN	0	1	1	0	0	0	0	1	1	2	3	2	0	0	0	0	0	0	0												
CONC.																															

0 = NO OBSERVATIONS

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

10 METER LEVEL

STATION AA23 PERIOD(12/01/80 TO 12/31/80)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNNW	NW	NNW	VAR
0	1	0	3	2	2	3	3	8	10	10	7	2	5	5	5	2	0
GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. - 11. :	0	0	0	0	0	0	0	1	9	8	0	0	0	0	0	0	18
5. - 8. :	0	0	0	0	0	0	0	4	18	19	16	0	2	1	1	0	61
3. - 5. :	0	0	0	1	0	0	1	2	19	37	31	0	1	4	4	0	100
1. - 3. :	0	2	0	2	9	29	31	27	23	33	40	11	13	34	23	12	289
LT 1. :	15	2	6	10	10	19	16	28	24	22	40	17	14	9	22	13	268
TOTAL :	15	4	6	13	19	48	48	62	93	119	127	28	30	48	50	25	736
PERCENT	2.	1.	1.	2.	3.	7.	7.	8.	13.	16.	17.	4.	4.	7.	7.	3.	0. 100.

0 = NO OBSERVATIONS

(01/16/81-RPI)



# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

30 METER LEVEL

STATION AA23 PERIOD(12/01/80 TO 12/31/80)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR
1	2	1	4	2	3	4	11	12	15	9	2	4	7	6	4	0	
GT 11. :	0	0	0	0	0	0	1	9	13	0	0	0	0	0	0	0	23
8. - 11. :	0	0	0	0	0	0	2	14	19	7	0	0	0	0	0	0	42
5. - 8. :	0	0	0	0	0	0	2	18	41	7	0	0	2	4	0	0	74
3. - 5. :	0	0	1	0	2	7	6	22	38	14	0	4	12	13	3	0	122
1. - 3. :	5	1	4	4	10	21	37	20	34	27	5	14	20	30	22	11	0 : 265
LT 1. :	11	5	10	12	15	18	17	14	11	12	25	13	10	7	17	13	0 : 210
TOTAL :	16	6	14	17	25	41	61	45	108	150	58	27	34	51	56	27	0 736
PERCENT	2.	1.	2.	2.	3.	6.	8.	6.	15.	20.	8.	4.	5.	7.	8.	4.	0. 100.

0 = NO OBSERVATIONS

(01/16/81-RPI)

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

60 METER LEVEL

STATION AA23 PERIOD(12/01/80 TO 12/31/80)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR
2	1	2	4	2	3	4	10	13	11	8	4	6	5	1			
GT 11. :	0	0	0	0	0	0	0	0	11	3	0	0	0	0	0	0	14
8. - 11. :	0	0	0	0	0	0	0	5	25	21	1	0	0	0	0	0	52
5. - 8. :	0	0	0	0	0	0	0	6	29	30	1	0	2	4	1	0	73
3. - 5. :	0	0	0	0	1	0	1	8	15	30	50	8	1	3	18	3	138
1. - 3. :	4	3	2	6	7	15	13	28	33	45	24	15	28	38	29	23	319
LT 1. :	11	7	5	5	4	3	7	11	11	8	3	11	11	17	6	9	138
TOTAL :	15	10	7	11	12	18	21	47	70	149	131	36	40	60	57	36	734
PERCENT	2.	1.	1.	1.	2.	2.	3.	6.	10.	20.	18.	5.	5.	8.	8.	5.	100.

0 = NO OBSERVATIONS

(01/16/81-RPI)

FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

10 METER LEVEL

STATION AD42 PERIOD (12/01/80 to 12/31/80)

DATA NOT AVAILABLE AT REPORT TIME

C-B SHALE OIL PROJECT

FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

STATION AD56 PERIOD (12/01/80 to 12/31/80)

DATA NOT AVAILABLE AT REPORT TIME



FIVE MAXIMUM SLIDING AVERAGE  
UG/H\*\*3

C-B TRACT  
SITE AB20  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR (BEG)	VALUE
S02	3 HR	1	19	8	14.0
		2	20	8	11.3
		3	23	8	9.6
		4	19	11	7.9
		5	28	8	7.9
S02	24 HR	1	19	1	7.0
		2	20	1	6.2
		3	22	11	6.0
		4	15	11	5.7
		5	28	2	5.7
C0	1 HR	1	28	2	0.0
		2	28	2	0.0
		3	28	2	0.0
		4	28	2	0.0
		5	28	2	0.0
C0	8 HR	1	28	2	0.0
		2	28	2	0.0
		3	28	2	0.0
		4	28	2	0.0
		5	28	2	0.0
03	1 HR	1	30	13	82.4
		2	30	14	82.4
		3	29	16	80.4
		4	30	15	80.4
		5	30	12	78.5
PART	24 HR	1	3	1	9.2
		2	12	1	7.5
		3	9	1	4.8
		4	30	1	4.8
		5	30	1	4.8

FIVE MAXIMUM SLIDING AVERAGE  
UG/M\*\*3

C-B TRACT  
SITE AB23  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR(BEG)	VALUE
S02	3 HR	1	25	1	13.1
		2	25	4	13.1
		3	25	7	13.1
		4	25	10	13.1
		5	25	24	12.2
S02	24 HR	1	24	14	11.9
		2	23	14	10.0
		3	21	23	9.7
		4	25	14	8.6
		5	20	23	4.8
C0	1 HR	1	17	19	300.0
		2	17	20	300.0
		3	17	21	300.0
		4	17	22	300.0
		5	16	16	200.0
C0	8 HR	1	17	16	300.0
		2	17	24	200.0
		3	16	14	200.0
		4	18	8	200.0
		5	5	14	100.0
03	1 HR	1	21	19	96.1
		2	21	20	94.2
		3	21	18	92.2
		4	21	21	92.2
		5	21	22	92.2
PART	24 HR	1	3	1	58.4
		2	12	1	6.4
		3	18	1	4.6
		4	6	1	4.1
		5	21	1	3.5

FIVE MAXIMUM SLIDING AVERAGE  
UG/M\*\*3

C-B TRACT  
SITE AD56  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR (BEG)	VALUE
PART	24 HR				
1		1	3	1	6.5
2		2	21	1	5.2
3		3	27	1	5.0
4		4	18	1	4.2
5		5	30	1	3.3

C-b TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

SOURCE OF DATA REPORTED  
PERCENT

NO NO<sub>x</sub> NO<sub>2</sub> O<sub>3</sub> CO SO<sub>2</sub>

MULTIPOINT  
RECORDER \*

DATA ACQUISITION  
SYSTEM

100 100 100 100 100 100

OTHER SYSTEMS

EFFICIENCY

100 100 100 100 100 100

\* Serves as Back-up to Data Acquisition System



C-b TRACT  
TRAILER AB20  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

SOURCE OF DATA REPORTED  
PERCENT

WS WD SIGMA TEMP INVERS. STB STB PART PRECIP.  
HWD 10m 50m 200m

MULTIPOINT  
RECORDER \*

DATA ACQUISITION  
SYSTEM

100 100 100 100

OTHER SYSTEMS

80 80 80 100 100

EFFICIENCY

100 100 100 100

\* Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

	NO	NO <sub>x</sub>	NO <sub>2</sub>	O <sub>3</sub>	SO <sub>2</sub>	H <sub>2</sub> S	CO	BAR PRESS.	SOLAR RAD.
--	----	-----------------	-----------------	----------------	-----------------	------------------	----	---------------	---------------

MULTIPOINT  
RECORDER \*

	10	10	10	10	9	10	8	10	10
--	----	----	----	----	---	----	---	----	----

DATA ACQUISITION  
SYSTEM

	90	90	90	90	90	90	90	90	90
--	----	----	----	----	----	----	----	----	----

OTHER SYSTEMS

EFFICIENCY

	100	100	100	100	99	100	98	100	100
--	-----	-----	-----	-----	----	-----	----	-----	-----

\* Serves as Back-up to Data Acquisition System

C-b TRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

SOURCE OF DATA REPORTED  
PERCENT

PREC

PART

RH

DT  
60-10m

TMP  
60m

TMP  
30m

TMP  
10m

MULTIPOINT  
RECORDER \*

10

10

10

10

DATA ACQUISITION  
SYSTEM

90

90

90

90

OTHER SYSTEMS

79

100

100

100

EFFICIENCY

79

100

100

100

\* Serves as Back-up to Data Acquisition System

C-bTRACT  
TRAILER AB23  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

SOURCE OF DATA REPORTED  
PERCENT

	SIGMA HWD 10m	SIGMA HWD 30m	SIGMA HWD 60m	WS 10m	WS 30m	WS 60m	WD 10m	WD 30m	WD 60m
MULTIPOINT RECORDER *				9	9	99	10	10	100
DATA ACQUISITION SYSTEM	90	90		90	90		90	90	
OTHER SYSTEMS									
EFFICIENCY	90	90	0	99	99	99	100	100	100

\*Serves as Back-up to Data Acquisition System



C-b TRACT  
SITE AD42  
DEC 1980  
OCCIDENTAL OIL SHALE, INC.

SOURCE OF DATA REPORTED  
PERCENT

WS	WD	TMP
10m	10m	10m

OTHER SYSTEMS

EFFICIENCY

C-b TRACT  
 SITE AD56  
 DEC 1980  
 OCCIDENTAL OIL SHALE, INC.

SOURCE OF DATA REPORTED  
 PERCENT

WS 10m	WD 10m	TMP 10m	PART
			100
OTHER SYSTEMS			
			100
EFFICIENCY			

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AIR MONITORING REPORT  
FOR  
PROTOTYPE OIL SHALE LEASE TRACT C-B

JANUARY 1981

SUBMITTED  
FEB. 23, 1981



PREPARED BY :  
OCCIDENTAL OIL SHALE, INC. OPERATOR  
P.O. BOX 2687  
GRAND JUNCTION, COLORADO 81501

## LIST OF TABLES

### SECTION I - AIR QUALITY & METEOROLOGICAL DATA

	<u>Page</u>
DIURNAL VARIATION OF GASEOUS AND PARTICULATE MATTER	
Nitric Oxide (NO) at Station AB20 . . . . .	II-208
Nitric Oxide (NO) at Station AB23 . . . . .	II-209
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB20 . . . . .	II-210
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB23 . . . . .	II-211
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB20 . . . . .	II-212
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB23 . . . . .	II-213
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-214
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-215
Carbon Monoxide (CO) at Station AB20 . . . . .	II-216
Carbon Monoxide (CO) at Station AB23 . . . . .	II-217
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 . . . . .	II-218
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 . . . . .	II-219
Hydrogen Sulfide (H <sub>2</sub> S) at Station AB23 . . . . .	II-220
Particulates Daily Average at Stations AB20, AB23, AD56 . . .	II-221
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS	
Wind Speed at Station AB20 . . . . .	II-222
Wind Speed at Station AA23 - 10 Meter Level . . . . .	II-223
Wind Speed at Station AA23 - 30 Meter Level . . . . .	II-224
Wind Speed at Station AA23 - 60 Meter Level . . . . .	II-225
Wind Speed at Station AD42 . . . . .	II-226
Wind Speed at Station AD56 . . . . .	II-227
Wind Direction at Station AB20 . . . . .	II-228
Wind Direction at Station AA23 - 10 Meter Level . . . . .	II-229
Wind Direction at Station AA23 - 30 Meter Level . . . . .	II-230
Wind Direction at Station AA23 - 60 Meter Level . . . . .	II-231
Wind Direction at Station AD42 . . . . .	II-232
Wind Direction at Station AD56 . . . . .	II-233

# LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS (Contd)	
Wind Direction and Vector Average at Station AB20 . . . . .	II-234
Wind Direction and Vector Average at Station AA23 -	
10 Meter Level . . . . .	II-235
Wind Direction and Vector Average at Station AA23 -	
30 Meter Level . . . . .	II-236
Wind Direction and Vector Average at Station AA23 -	
60 Meter Level . . . . .	II-237
Sigma Horizontal Wind Direction at Station AB20 -	
10 Meter Level . . . . .	II-238
Sigma Horizontal Wind Direction at Station AA23 -	
10 Meter Level . . . . .	II-239
Sigma Horizontal Wind Direction at Station AA23 -	
30 Meter Level . . . . .	II-240
Sigma Horizontal Wind Direction at Station AA23 -	
60 Meter Level . . . . .	II-241
Ambient Air Temperature at Station AB20 . . . . .	II-242
Ambient Air Temperature at Station AA23 -	
10 Meter Level . . . . .	II-243
Ambient Air Temperature at Station AA23 -	
30 Meter Level . . . . .	II-244
Ambient Air Temperature at Station AA23 -	
60 Meter Level . . . . .	II-245
Ambient Air Temperature at Station AD42 . . . . .	II-246
Ambient Air Temperature at Station AD56 . . . . .	II-247
Delta Temperature (60m - 10m) at Station AA23 . . . . .	II-248
Relative Humidity at Station AB23 - 3 Meter Level . . . . .	II-249
Solar Radiation at Station AB23 . . . . .	II-250
Barometric Pressure at Station AB23 . . . . .	II-251
Precipitation at Station AB20 . . . . .	II-252
Precipitation at Station AB23 . . . . .	II-253
Evaporation at Station AB23 . . . . .	II-254

# LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS (Contd)	
Inversion Height at Station AC20 . . . . .	II-255
Stability Class at Station AC20 - 50 Meter Level . . . . .	II-256
Stability Class at Station AC20 - 200 Meter Level . . . . .	II-257
Pasquill-Gifford Stability Class using DT/DZ - (60m - 10m) at Station AA23 . . . . .	II-258
MONTHLY SUMMARY REPORT: NO. OF 1 - HOUR SAMPLES OF GASEOUS PARAMETERS BY CONCENTRATION AND BY WIND DIRECTION, 10 METER LEVEL	
Nitric Oxide (NO) at Station AB20 . . . . .	II-259
Nitric Oxide (NO) at Station AB23 . . . . .	II-260
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB20 . . . . .	II-261
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB23 . . . . .	II-262
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB20 . . . . .	II-263
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB23 . . . . .	II-264
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-265
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-266
Carbon Monoxide (CO) at Station AB20 . . . . .	II-267
Carbon Monoxide (CO) at Station AB23 . . . . .	II-268
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 . . . . .	II-269
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 . . . . .	II-270
Hydrogen Sulfide (H <sub>2</sub> S) at Station AB23 . . . . .	II-271
MONTHLY SUMMARY REPORT: FREQUENCY TABLE OF WIND SPEED BY DIRECTION	
Station AB20 . . . . .	II-272
Station AA23 - 10 Meter Level . . . . .	II-273
Station AA23 - 30 Meter Level . . . . .	II-274
Station AA23 - 60 Meter Level . . . . .	II-275
Station AD42 . . . . .	II-276
Station AD56 . . . . .	II-277
MONTHLY SUMMARY REPORT: FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES	
Particulate at Station AB20 . . . . .	II-278
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-278



# LIST OF TABLES SECTION I (Contd)

Page

## MONTHLY SUMMARY REPORT: FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES (Contd)

Carbon Monoxide (CO) at Station AB20 - 1 Hour . . . . .	II-278
Carbon Monoxide (CO) at Station AB20 - 8 Hour . . . . .	II-278
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 - 3 Hour . . . . .	II-278
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 - 24 Hour . . . . .	II-278
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 - 3 Hour . . . . .	II-279
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 - 24 Hour . . . . .	II-279
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-279
Particulate at Station AB23 . . . . .	II-279
Carbon Monoxide (CO) at Station AB23 - 1 Hour . . . . .	II-279
Carbon Monoxide (CO) at Station AB23 - 8 Hour . . . . .	II-279
Particulate at Station AD56 . . . . .	II-280

## MONTHLY SUMMARY REPORT: INSTRUMENT EFFICIENCY

Station AB20 . . . . .	II-281
Station AB23 . . . . .	II-283
Station AD42 . . . . .	II-286
Station AD56 . . . . .	II-287

NITRIC OXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	2	2	2	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	4
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
9	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
12	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
13	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
14	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
16	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
17	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
18	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
19	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
21	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
22	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
23	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
24	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
25	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
26	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
27	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
28	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
29	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
30	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
31	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
AV	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
PK	2	2	2	2	2	2	2	4	5	4	4	4	4	7	2	2	2	2	2	2	2	2	2	2	7

NITRIC OXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0	0	0	0	0	0	0	0	5	6	9	20	10	10	5	0	0	0	0	0	0	0	0	0	3	20
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	1	2	2	2	2	2	2	2	1	2	1	9	4	7	5	5	2	1	1	1	1	1	2	2	3	9
6	2	2	2	2	2	2	2	4	7	4	5	4	9	5	4	4	2	1	1	1	1	2	2	3	7	
7	2	2	2	2	2	2	2	4	2	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	1	0	0	0	0	0	1	1	1	2	
8	1	1	1	2	2	2	2	2	4	4	2	4	4	5	2	2	1	1	1	1	1	1	1	1	2	
9	1	1	2	2	2	2	2	2	2	2	4	5	6	5	6	1	1	1	1	1	1	1	1	1	5	
10	2	2	2	2	2	2	2	2	2	2	12	7	1	1	1	0	0	0	0	0	0	1	1	1	10	
11	2	2	2	2	2	2	2	2	2	2	7	7	2	2	0	0	0	0	0	0	0	1	1	1	6	
12	2	2	2	2	2	2	2	2	2	7	4	7	2	0	0	1	0	0	0	0	0	1	1	1	12	
13	1	2	2	2	2	2	2	1	2	1	0	0	0	0	0	1	0	0	0	0	0	1	1	1	7	
14	2	2	2	2	2	2	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
15	2	2	2	2	2	2	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19	7	2	2	2	2	2	2	2	2	4	2	5	2	2	1	1	1	1	1	1	1	1	1	1	1	2
20	2	2	2	2	2	2	2	2	4	4	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2
21	2	2	2	2	2	2	2	2	4	4	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2
22	1	1	1	1	1	1	1	2	2	2	2	4	4	2	1	0	0	0	0	0	0	0	0	0	0	2
23	1	1	1	1	1	1	1	2	2	2	2	4	4	2	2	2	2	2	2	2	2	2	2	2	2	1
24	1	1	1	1	1	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
25	1	1	1	1	1	1	1	2	2	2	2	4	4	2	2	2	2	2	2	2	2	2	2	2	2	1
26	2	2	2	2	2	2	2	2	2	5	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	1
27	1	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	1
28	1	1	1	1	1	1	1	2	2	2	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	1
29	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
31	0	1	1	1	1	1	1	1	1	1	2	2	2	4	6	2	2	1	1	1	1	2	1	1	2	6
AV	1	1	1	1	1	1	1	2	2	2	2	3	2	2	1	1	1	1	1	1	1	1	1	1	1	20
PK	7	2	6	2	4	2	2	5	7	7	12	20	10	10	6	2	2	2	2	2	2	2	2	2	2	2

OXIDES OF NITROGEN  
(UG/M3)

CB-TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	8	6	6	6	6	6	6	6	6	6	8	6	6	6	4	6	6	6	6	6	6	6	4	6	6	8
2	8	6	4	6	6	6	6	6	6	6	8	8	8	8	6	8	6	8	8	8	8	6	6	8	6	8
3	8	6	6	6	6	6	6	6	6	6	6	6	6	6	4	6	6	6	6	6	6	6	6	6	6	8
4	8	6	6	6	4	6	4	6	6	6	6	6	6	4	4	6	4	6	6	6	6	6	6	6	5	8
5	8	8	6	6	6	6	6	6	4	4	6	6	4	6	6	6	15	11	8	9	8	8	8	8	7	15
6	9	8	8	6	6	6	6	9	4	6	6	6	6	6	6	6	4	9	8	6	6	6	6	6	6	9
7	6	6	4	6	4	4	6	9	9	6	6	6	6	6	4	4	8	9	8	8	6	6	6	6	6	9
8	8	6	6	6	6	6	6	11	9	9	11	8	6	6	6	6	9	8	8	8	6	6	6	6	6	9
9	8	6	4	6	6	6	6	11	9	8	6	6	4	6	6	4	8	8	8	8	6	6	6	6	6	11
10	6	6	6	6	4	6	6	11	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	6
11	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	8	8	9	8	8	6	6	6	9
12	8	6	6	6	6	6	6	9	8	11	8	8	8	8	6	6	8	8	8	8	8	6	6	6	7	11
13	8	6	6	6	6	6	6	11	13	9	9	9	9	8	6	4	4	8	8	6	6	6	6	6	6	13
14	8	6	4	6	6	6	6	13	13	9	11	11	6	15	0	0	0	0	0	0	0	0	0	0	0	15
15	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2	2	0	2	2	2	1	2
22	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	2	0	2	2	0	0	0	0	0	0	2
23	0	0	0	0	0	0	0	0	2	0	0	2	2	2	2	2	2	2	2	2	0	2	0	0	0	2
24	0	2	0	0	0	0	0	0	0	0	0	2	2	2	2	2	2	2	0	0	0	0	0	0	1	2
25	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2	0	0	2	0	0	0	0	2
26	0	0	0	0	2	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
27	0	0	0	0	0	2	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
28	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	3	3	3	3	3	3	3	4	4	3	4	3	3	3	2	3	3	4	3	3	3	3	3	3	3	15
PK	9	8	8	6	6	6	8	13	13	11	11	11	9	15	6	8	15	11	8	9	8	8	8	8	8	15



OXIDES OF NITROGEN  
(UG/M3)

CB-TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)
2	6	8	6	6	8	6	6	4	2	6	8	6	6	4	2	4	2	4	4	6	2	6	4	4	4	4
3	2	4	4	2	6	6	6	4	4	6	6	6	4	2	2	2	0	2	4	2	2	2	2	2	2	5
4	0	2	6	4	4	9	2	6	19	0	4	0	0	0	0	0	0	0	2	4	4	4	4	4	4	3
5	4	6	6	6	8	9	6	6	4	0	0	0	0	0	0	4	4	2	4	4	6	8	6	4	4	6
6	4	4	6	6	6	4	4	4	4	4	2	19	6	17	11	4	2	2	2	2	2	4	4	4	4	19
7	2	4	2	4	4	4	13	24	17	4	4	8	19	9	11	4	0	0	2	2	2	2	2	11	6	24
8	15	8	2	2	4	4	4	13	19	4	6	8	4	6	8	4	8	6	6	2	2	4	2	6	6	19
9	6	2	2	2	4	4	4	4	4	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	0	0	0	2	2	2	2	2	2	6
10	2	2	4	8	19	21	21	21	19	9	6	8	8	11	4	6	2	2	0	2	2	2	4	4	4	21
11	4	4	11	15	23	13	11	11	8	8	6	21	9	11	13	4	4	4	6	6	6	6	4	6	9	23
12	8	6	6	4	6	4	4	4	6	9	8	11	15	4	4	6	8	6	6	6	8	8	17	9	7	17
13	6	6	8	9	9	8	8	8	8	8	28	15	4	2	2	8	4	2	2	4	4	2	2	6	7	28
14	6	9	13	6	11	17	19	13	24	19	8	21	9	2	0	0	0	0	0	4	4	2	2	2	8	24
15	2	2	2	2	2	4	4	4	6	2	0	0	0	0	0	0	0	4	0	4	4	4	4	4	2	6
16	6	4	6	6	4	4	4	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	4	6	9	0	9
20	32	24	11	8	13	8	6	8	11	6	15	6	4	4	2	2	4	4	6	2	2	4	6	6	8	32
21	6	4	6	6	6	6	6	6	11	9	(CA)	2	4	4	2	9	2	2	2	4	6	8	6	8	6	15
22	9	2	2	4	15	9	11	19	11	6	(CA)	6	4	4	4	4	4	2	2	4	4	4	4	15	7	19
23	13	9	13	6	6	4	6	8	6	6	2	0	0	0	0	0	0	0	0	0	0	0	0	2	3	13
24	2	2	2	0	0	0	0	0	4	6	8	8	6	2	4	4	4	0	0	0	2	4	4	2	4	4
25	2	4	2	4	4	4	4	4	4	6	8	8	6	2	4	0	4	4	6	4	4	4	2	4	4	8
26	4	6	6	8	6	8	8	9	9	11	9	8	8	4	0	0	0	0	0	0	0	0	2	2	4	11
27	4	4	4	4	4	4	2	4	6	2	0	0	0	0	0	0	0	0	0	0	2	2	0	0	2	6
28	0	2	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
29	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	2
30	2	0	2	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
31	2	2	2	2	2	2	2	4	2	4	4	6	6	11	17	11	6	6	4	6	4	6	4	6	5	17
AV	5	4	4	4	6	5	5	6	7	5	5	6	4	3	3	2	2	2	2	2	2	3	3	4	4	4
PK	32	24	13	15	23	21	21	24	24	19	28	21	19	17	17	11	8	6	6	6	8	8	17	15	4	32



NITROGEN DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	4	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	4
2	4	2	0	4	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	3
3	4	2	2	2	2	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2
4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4
5	4	4	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	13
6	6	4	4	2	2	2	2	2	2	2	2	2	2	2	(MT)	4	2	2	2	2	2	2	2	2	3
7	2	4	2	2	2	2	2	2	2	2	2	2	2	2	0	0	4	4	4	4	4	4	4	4	2
8	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	6	4	4	4	4	4	4	4	2
9	4	2	0	2	2	2	2	2	2	2	2	2	2	2	2	0	4	4	4	4	4	4	4	4	3
10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	2
11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	2
12	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	2
13	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	2
14	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	2
15	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0
18	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1
PK	6	4	4	4	2	2	4	8	8	6	6	6	4	4	4	4	13	9	6	8	6	6	6	4	13

NITROGEN DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK	
1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)												
2	6	8	6	6	8	6	6	4	2	6	8	6	6	4	2	4	2	4	4	6	4	2	4	4	4	( )	4
3	2	4	4	2	6	6	6	4	4	6	6	6	4	2	2	2	0	2	2	2	2	6	4	2	2	5	8
4	0	2	6	4	4	2	2	6	4	2	4	2	0	0	0	0	0	0	0	2	4	2	4	2	2	3	6
5	4	6	6	8	8	9	6	6	17	0	0	0	0	0	4	0	4	2	2	2	2	6	4	2	2	2	6
6	2	0	2	2	2	0	0	0	0	0	0	6	0	6	4	0	0	0	0	0	0	0	0	0	0	17	6
7	0	0	0	0	0	0	9	19	11	0	0	2	6	2	4	0	0	0	0	0	0	0	0	0	0	4	1
8	11	4	0	4	0	0	0	8	8	0	0	0	6	2	4	0	4	4	4	4	0	0	0	8	8	3	19
9	2	0	0	0	0	0	0	0	0	9	11	6	9	4	0	0	0	0	0	0	0	0	0	2	2	11	11
10	0	2	2	4	15	17	17	17	13	4	2	2	2	4	4	2	0	2	2	4	4	4	2	2	4	4	17
11	2	2	8	11	19	9	8	8	4	2	0	6	6	4	4	0	2	2	2	4	4	6	15	6	3	15	
12	4	2	2	0	2	0	0	0	2	6	4	4	6	2	2	2	4	4	4	4	6	6	4	4	4	3	15
13	2	2	4	6	6	4	4	4	4	4	9	9	6	0	2	6	4	2	2	2	2	6	4	4	6	3	9
14	2	6	9	2	8	13	15	9	13	8	2	9	6	0	0	6	0	0	0	0	2	0	4	0	4	3	9
15	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	2	2	2	0	2	2	0	4	15	
16	2	0	2	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	4	4	4	6	2	0	4	0	0	0	2	2	2	0	0	2	4	8	1	8	21
20	21	0	8	2	8	4	4	2	6	2	8	2	0	4	0	0	0	0	0	0	0	2	4	6	2	4	15
21	2	0	2	2	2	2	2	15	6	4	(CA)	(CA)	2	0	0	6	0	0	0	2	4	6	4	6	2	8	15
22	6	0	0	0	11	6	8	15	6	2	8	2	0	2	2	2	2	0	0	2	2	2	0	11	4	15	
23	9	6	4	2	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9	4
24	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	4	0	0	0	4	4
25	0	2	0	2	2	2	2	0	0	2	4	4	2	0	0	0	0	2	2	2	2	0	0	0	1	4	4
26	0	2	2	4	2	4	4	6	6	4	4	2	2	2	0	0	0	0	0	0	0	0	0	0	2	6	6
27	2	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2	2
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
29	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
30	2	0	2	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
31	2	0	0	0	0	0	0	2	0	2	0	2	2	6	8	8	2	4	2	4	2	2	2	4	2	8	
AV	3	2	2	2	3	3	3	4	4	2	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	21
PK	21	21	9	11	19	17	17	19	17	9	11	9	9	6	8	8	8	4	4	4	6	6	15	11	4	21	

OZONE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	2	2	12	22	25	25	25	24	16	10	6	10	10	12	14	14	9	25
2	12	12	14	16	14	14	14	14	18	22	25	39	43	39	37	37	33	27	22	20	18	16	14	10	22	43
3	12	10	10	10	8	8	8	8	4	16	25	33	41	41	39	39	31	22	18	14	14	16	12	10	19	41
4	6	8	12	16	14	12	14	10	14	20	24	33	39	39	41	39	37	37	37	29	25	16	10	8	22	41
5	0	0	0	4	16	20	24	20	24	25	25	29	33	35	33	33	20	16	12	8	4	0	0	0	16	35
6	0	0	0	0	2	4	6	8	20	20	22	24	29	31	(MT)	35	20	12	10	10	10	8	8	8	12	35
7	12	12	10	4	4	12	8	4	16	22	18	24	29	35	37	37	20	14	8	8	10	10	10	8	15	37
8	6	8	10	10	12	14	16	2	2	12	27	37	45	55	53	49	33	29	27	25	27	27	24	16	24	55
9	22	25	27	25	16	16	22	20	25	31	33	47	49	51	53	51	43	31	27	25	25	27	25	25	31	53
10	24	22	22	24	22	20	22	22	20	27	33	39	43	49	49	47	47	35	27	24	24	25	24	24	30	49
11	20	22	20	20	20	20	20	22	24	25	33	31	41	45	49	47	37	25	22	20	22	22	20	20	27	49
12	20	22	20	18	18	22	24	22	27	22	35	35	41	41	45	47	37	25	22	20	18	18	18	20	26	47
13	22	22	18	8	10	20	20	24	27	31	33	33	43	45	45	43	37	29	20	18	18	18	18	16	26	45
14	16	18	18	16	16	16	18	14	10	20	27	31	37	43	51	53	47	33	29	31	29	31	31	29	28	53
15	31	31	31	29	29	20	18	12	14	25	31	37	53	55	98	100	88	71	65	61	61	63	67	61	48	100
16	51	57	59	57	57	55	55	47	51	61	47	37	37	39	43	43	35	29	18	16	16	18	18	8	40	61
17	6	2	6	2	2	12	4	4	8	12	20	29	49	51	45	39	27	24	24	22	22	22	14	14	19	51
18	16	16	16	16	16	10	18	6	12	18	25	47	49	55	53	51	47	37	25	22	24	22	14	10	25	55
19	12	14	14	14	16	16	18	14	20	25	37	55	57	57	57	57	59	53	31	27	29	25	25	24	30	57
20	22	25	22	22	24	24	16	12	12	18	33	41	43	47	49	49	49	35	25	35	37	37	37	37	34	59
21	37	37	37	37	37	37	37	37	37	43	45	51	59	59	59	49	47	35	27	25	22	22	22	18	38	59
22	18	20	22	22	22	22	14	14	24	29	37	43	47	49	49	53	49	45	25	22	24	24	22	25	29	53
23	20	16	14	8	10	10	8	2	16	18	27	35	57	63	59	55	57	69	73	61	41	41	41	39	32	63
24	39	39	33	35	35	35	35	37	39	49	65	65	69	74	67	71	73	69	73	61	49	55	55	45	53	74
25	45	35	27	27	31	33	25	25	27	37	57	61	63	65	65	65	61	53	39	39	33	31	33	29	42	65
26	25	27	27	27	29	29	31	27	22	41	55	59	61	61	61	65	55	53	49	43	37	31	35	37	41	65
27	27	31	35	31	33	29	29	33	27	33	45	55	55	51	55	51	51	49	43	45	41	41	39	37	40	55
28	37	37	43	39	45	43	37	33	39	47	51	55	53	53	53	57	55	51	43	47	51	51	49	55	47	57
29	55	55	47	45	45	45	37	31	33	39	55	65	65	67	67	73	73	63	57	55	67	65	67	67	56	73
30	63	61	63	63	63	67	61	61	67	69	69	73	69	73	76	76	78	74	73	69	61	53	53	53	66	78
31	57	59	51	47	47	51	57	57	61	63	65	67	67	61	61	59	59	57	57	49	43	43	45	43	55	67
AV	24	24	23	22	23	24	23	20	24	30	37	43	48	50	53	52	46	38	33	30	29	29	28	26	32	100
PK	63	61	63	63	63	67	61	61	67	69	69	73	69	74	98	100	88	74	73	69	67	65	67	67	67	

OZONE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
2	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
3	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
4	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
5	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
6	49	41	47	49	51	55	59	61	57	59	61	57	73	74	74	67	61	59	57	57	53	45	49	47	60	74
7	76	74	78	71	71	69	57	49	63	74	73	69	63	76	76	80	80	73	69	69	63	67	71	71	62	80
8	53	63	71	65	73	74	74	57	51	65	63	74	86	88	88	92	82	74	73	78	74	73	71	55	69	80
9	69	74	78	78	63	61	67	76	73	47	59	73	67	76	88	92	86	80	76	74	78	76	76	78	74	92
10	78	76	74	67	47	43	43	41	51	63	67	78	82	76	88	82	84	76	74	74	74	76	74	73	69	88
11	73	69	53	45	35	53	55	53	61	55	67	67	74	76	80	94	82	71	63	65	67	69	67	65	65	94
12	61	65	59	63	61	67	69	71	65	67	63	74	80	94	94	84	80	82	74	76	74	69	53	69	71	94
13	71	76	69	63	63	67	69	71	69	73	65	73	90	88	88	80	73	71	71	74	76	74	76	74	73	90
14	73	71	59	61	57	49	45	51	43	53	61	53	69	92	98	98	98	96	96	90	92	96	98	98	75	98
15	94	92	98	98	98	96	94	86	82	88	92	94	100	102	106	108	108	96	90	86	88	88	78	74	93	108
16	69	67	65	65	65	61	63	63	61	55	59	45	59	65	74	76	71	67	61	61	61	74	78	78	65	78
17	73	74	76	78	74	74	73	76	74	76	80	82	84	82	82	80	82	78	73	74	71	73	76	74	77	84
18	76	76	69	71	74	61	55	57	51	59	74	78	78	92	96	90	84	78	78	73	63	67	69	74	73	96
19	73	78	78	76	76	74	74	73	69	59	80	90	94	96	98	96	96	88	84	78	84	78	78	74	81	98
20	59	49	59	67	59	63	76	78	59	59	69	82	82	86	88	90	84	88	84	80	82	82	84	82	75	90
21	78	80	84	78	80	73	71	73	67	73	76	90	90	88	90	82	86	80	76	74	71	65	63	59	77	90
22	57	71	71	67	53	63	55	49	61	67	59	63	90	94	96	98	90	84	80	82	82	84	82	61	73	98
23	67	71	74	80	78	82	82	78	78	78	86	98	98	92	90	94	98	94	94	88	84	82	84	86	85	98
24	84	86	86	82	82	82	82	86	88	100	102	104	108	114	112	110	110	108	108	104	88	86	88	84	95	114
25	84	73	80	80	73	78	80	74	80	84	86	90	96	98	100	100	96	92	84	82	88	86	84	78	85	100
26	80	80	82	80	76	76	76	69	69	84	88	88	90	96	94	96	94	92	90	90	90	88	90	90	86	96
27	92	88	88	88	88	88	88	86	88	88	92	92	94	94	94	92	90	90	86	84	90	90	90	90	90	94
28	88	86	86	88	88	88	84	86	86	80	82	82	82	82	80	80	78	74	73	74	76	76	80	78	82	88
29	80	78	69	63	73	78	73	80	74	88	90	82	86	96	94	94	94	90	88	86	88	86	88	88	84	96
30	84	84	84	82	82	82	84	84	84	82	84	86	84	86	90	94	96	94	90	88	86	84	86	84	86	96
31	86	84	78	78	78	78	74	74	76	78	80	80	80	69	61	63	63	61	69	65	65	61	69	73	73	86
AV	74	74	74	72	70	71	70	69	68	71	75	78	83	87	89	89	86	82	79	78	77	77	77	75	77	77
PK	94	92	98	98	98	96	94	86	88	100	102	104	108	114	112	110	110	108	108	104	92	96	98	98	98	114

(02/18/81-RP1)



CARBON MONOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



CARBON MONOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	100	100	200	200	100	0	0	0	0	0	0	0	0	0	200
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	100	100	100	100	0	0	0	100	100	100	100	100	200	200	200	100	100	200	200	100	100	100	100	100	100
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	100	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	100	100	100	100	100	100	100	0
23	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100
24	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100
25	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100
26	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100
27	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100
28	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100
29	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100
30	100	100	100	100	100	100	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100
31	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
AV	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	100	0	0	0	0	0	0	0	0	0
PK	100	100	100	100	100	100	100	100	100	100	100	100	200	200	200	300	300	200	200	200	100	100	100	100	300

SULFUR DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	5	5	5	5	5	5	5	5	5	5	8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	8
2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
9	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
10	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
11	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
12	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
13	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
14	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
15	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
16	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
17	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
18	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
19	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
20	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
21	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
22	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
23	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
24	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
25	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
26	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
27	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
28	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
29	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
30	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
31	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

AV	3	3	3	3	3	3	3	3	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	16
PK	5	5	5	5	5	8	8	8	10	8	8	8	8	16	5	5	5	5	5	8	5	5	5	5	3	3

SULFUR DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
9	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
10	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
11	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
12	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
13	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
14	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
15	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
16	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
21	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
22	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
23	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
24	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
25	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
26	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
27	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
28	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
29	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
30	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
31	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
AV	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
PK	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

CB-TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

(02/18/81-RPI)

PARTICULATE DATA  
UG/M3

CB-TRACT  
JAN 1981  
OCCIDENTAL OIL SHALE, INC

DAY	STATION		AD56
	AB20	AB23	
2	2.8	8.5	2.9
5	23.4	0.9	5.2
8	1.5	6.1	15.6
11	3.7	3.7	0.7
14	1.5	3.7	5.6
17	6.8	5.9	1.1
20	9.5	13.6	1.9
23	14.0	4.9	4.2
26	2.9	9.8	4.0
29	2.9	3.3	1.7
PK	23.4	13.6	15.6
AV	6.9	6.0	4.3
GM	4.6	4.9	3.0



WIND SPEED @10M  
METERS/SEC

CB-TRACT  
TRAILER AH20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	1	1	1	1	1	0	1	0	1	(CM)	1	2	2	3	2	2	(CM)	1	1	2	2	1	2	1	1	3
2	1	2	3	2	1	2	1	3	4	4	1	2	2	2	2	0	2	1	0	1	2	2	1	0	2	4
3	1	2	1	1	2	1	1	0	0	2	0	1	1	2	2	2	(CM)	1	1	1	1	0	1	1	1	2
4	1	2	4	3	1	3	4	1	3	3	1	0	2	3	3	2	1	2	1	0	0	0	0	0	2	4
5	0	0	1	1	3	3	3	3	3	3	4	4	4	3	2	0	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	2	4
6	(CM)	(CM)	0	1	2	2	2	1	2	2	2	2	1	2	1	0	0	2	1	2	2	2	2	2	2	3
7	2	2	2	2	0	2	2	1	2	2	3	2	2	2	2	1	1	2	2	2	1	1	2	2	2	3
8	2	2	2	0	0	2	2	2	1	(CM)	1	1	0	0	(CM)	1	1	2	0	2	3	2	1	0	2	3
9	2	2	1	1	0	1	0	0	0	2	0	1	1	2	4	3	1	1	0	2	1	2	2	3	2	4
10	3	2	1	2	3	3	2	3	3	4	2	1	2	2	2	2	0	1	1	1	2	2	2	3	2	4
11	2	2	1	1	2	3	2	1	1	(CM)	1	1	3	4	3	2	(CM)	0	1	2	1	2	2	3	2	4
12	4	2	1	1	2	3	2	1	3	1	1	3	3	3	4	3	2	0	1	2	1	2	2	3	2	4
13	3	1	(CM)	(CM)	(CM)	1	2	4	4	3	1	3	3	3	4	3	2	1	1	2	2	2	2	3	2	4
14	2	2	3	2	1	0	1	0	(CM)	2	0	3	2	1	2	2	0	1	2	2	2	3	2	2	2	3
15	3	2	1	1	2	1	0	1	(CM)	1	(CM)	1	2	2	1	0	1	(CM)	(CM)	(CM)	2	2	1	(CM)	2	3
16	(CM)	1	1	0	0	0	0	(CM)	1	1	(CM)	0	3	2	2	1	0	1	(CM)	0	0	0	0	(CM)	1	3
17	(CM)	1	(CM)	(CM)	(CM)	1	0	(CM)	(CM)	1	(CM)	0	0	2	2	0	1	2	2	1	1	1	2	2	1	2
18	1	1	0	0	0	(CM)	(CM)	0	(CM)	0	0	0	2	2	2	2	2	1	1	(CM)	(CM)	(CM)	(CM)	1	1	2
19	1	1	0	1	1	1	1	1	3	3	1	0	1	1	2	1	0	1	1	1	1	1	2	1	1	3
20	1	2	1	1	1	(CM)	(CM)	(CM)	(CM)	0	3	5	4	1	3	4	3	2	(CM)	(CM)	(CM)	(CM)	2	1	1	3
21	(CM)	(CM)	3	3	2	3	4	2	3	3	1	2	2	4	4	2	1	1	(CM)	(CM)	2	1	0	1	2	5
22	1	1	3	3	3	0	(CM)	1	2	3	(CM)	2	3	3	3	3	2	1	1	1	1	0	0	1	2	3
23	0	(CM)	(CM)	(CM)	(CM)	0	(CM)	0	(CM)	1	2	2	1	2	3	1	1	1	2	2	4	5	4	1	2	3
24	4	1	2	2	2	2	2	3	3	2	5	4	4	4	6	6	1	1	3	(CM)	0	1	4	1	2	6
25	1	(CM)	0	0	1	0	0	1	0	1	0	1	1	0	1	2	1	1	1	(CM)	1	1	1	0	1	2
26	1	0	1	1	0	2	3	1	(CM)	1	(CM)	1	1	1	2	1	0	1	2	0	(CM)	(CM)	1	0	1	3
27	0	1	1	1	0	1	1	1	0	2	1	2	2	2	2	2	1	1	1	2	1	1	1	0	1	2
28	1	0	1	1	2	(CM)	1	1	1	2	4	4	3	3	3	4	4	3	3	2	1	1	2	2	4	4
29	2	2	(CM)	(CM)	1	0	(CM)	(CM)	0	(CM)	1	4	3	3	3	3	2	1	0	2	3	2	2	2	2	4
30	4	3	4	3	3	3	1	4	4	4	3	4	1	3	3	3	3	0	1	2	0	1	1	(CM)	3	4
31	(CM)	1	0	1	2	1	2	2	0	0	(CM)	(CM)	0	3	3	2	2	0	0	(CM)	0	0	(CM)	(CM)	1	3
AV	2	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	1	1	2	6
PK	4	3	4	3	3	3	4	4	4	4	5	5	4	4	6	6	4	3	3	2	4	5	4	3	2	6

WIND SPEED @ 10M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	(CM)	1	0	0	(CM)	(CM)	(CM)	0	0	(CM)	0	1	1	2	1	1	2	2	2	(CM)	(CM)	1	1	1	2
2	2	2	1	2	1	1	1	2	2	2	3	3	3	3	2	1	1	2	3	3	0	2	2	1	1
3	0	0	1	2	0	1	1	1	0	0	0	2	4	4	3	3	2	2	2	1	1	1	0	0	2
4	0	1	2	2	1	1	2	2	2	1	0	2	5	5	4	4	2	2	4	2	2	1	0	0	1
5	1	0	1	2	3	3	4	4	4	3	3	4	4	3	2	2	2	1	0	1	1	1	0	0	4
6	0	1	1	1	1	0	1	2	1	1	(CM)	1	0	1	1	0	1	(CM)	1	1	2	1	(CM)	0	2
7	1	2	1	1	1	1	0	1	1	1	1	1	1	1	1	2	2	2	1	1	0	(CM)	1	1	1
8	1	0	0	(CM)	1	0	1	1	1	1	0	(CM)	0	0	0	0	1	2	2	2	0	0	1	1	2
9	0	1	0	0	2	0	1	0	0	(CM)	0	1	1	2	3	3	2	1	2	1	0	0	0	1	1
10	(CM)	1	0	0	0	0	0	(CM)	0	0	1	1	1	1	2	2	2	2	1	2	1	0	0	(CM)	1
11	0	0	1	0	(CM)	0	(CM)	(CM)	0	1	1	1	1	1	1	1	2	2	2	2	1	0	0	0	1
12	0	1	1	1	0	0	(CM)	(CM)	(CM)	1	0	1	1	2	2	1	1	2	2	2	1	0	1	0	1
13	1	1	1	2	1	1	0	(CM)	1	(CM)	1	2	2	2	2	2	3	3	1	1	2	1	1	(CM)	1
14	0	0	0	1	0	0	(CM)	1	0	(MT)	(MT)	(MT)	(MT)	(MT)	4	3	3	3	1	1	2	0	0	0	1
15	1	1	1	1	1	1	1	(CM)	1	0	2	2	1	0	0	0	(CM)	1	1	1	1	1	1	1	1
16	2	2	1	1	1	2	1	0	1	1	1	1	2	2	2	2	1	1	1	1	1	2	1	1	2
17	1	1	1	1	1	1	1	2	2	1	1	1	1	2	2	3	3	1	1	2	1	1	0	1	1
18	0	(CM)	1	2	1	1	1	0	1	1	1	1	2	3	2	2	2	2	1	1	0	1	1	1	1
19	2	1	1	1	0	(CM)	1	1	0	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	2
20	1	1	1	1	1	1	(CM)	0	1	2	2	3	4	4	4	4	4	2	2	1	1	1	0	0	4
21	0	1	0	1	(CM)	1	0	0	(CM)	0	(CM)	1	1	2	3	2	2	1	1	1	0	(CM)	1	0	1
22	0	1	0	1	1	1	0	0	(CM)	0	0	1	2	2	2	2	2	1	1	1	1	0	1	1	2
23	(CM)	1	(CM)	0	0	0	1	0	2	1	2	4	3	3	4	4	3	2	2	2	2	2	3	2	4
24	1	4	6	4	4	3	2	2	2	4	7	7	8	8	8	8	5	2	3	1	0	1	0	1	8
25	1	0	1	1	(CM)	1	2	1	0	1	2	1	1	1	1	2	2	1	1	1	2	0	0	2	2
26	1	1	0	2	0	1	1	0	0	0	3	3	4	4	4	4	4	4	2	1	1	(CM)	0	1	4
27	(CM)	0	0	0	1	1	1	1	2	2	3	6	7	5	6	6	5	4	4	1	1	2	2	2	4
28	3	2	2	4	4	1	1	2	5	6	5	6	4	5	4	4	4	4	4	5	6	5	4	2	7
29	3	1	0	0	2	1	1	1	1	3	5	6	4	5	4	4	4	1	1	1	4	3	3	7	7
30	4	4	4	3	3	2	6	9	5	7	7	8	3	5	3	4	5	4	4	3	3	2	2	1	4
31	2	1	1	2	2	2	1	1	1	0	1	1	2	4	4	5	4	3	3	1	1	2	2	2	5
AV	1	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	2	2	1	1	1	1	1	2
PK	4	4	6	4	4	3	6	9	5	7	7	8	8	8	6	6	5	5	4	5	6	5	6	7	9

WIND SPEED @ 30M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	(CM)	3	2	3	(CM)	3	0	0	(CM)	0	1	1	2	2	2	4	3	3	0	(CM)	1	1	1	1	4
2	4	3	0	1	2	(CM)	2	4	3	3	4	4	4	4	4	2	3	4	5	1	3	2	1	0	3	5
3	0	0	1	2	1	0	1	2	0	1	0	2	5	4	4	5	4	4	5	1	2	0	0	1	1	2
4	0	1	2	2	1	2	4	4	3	2	0	3	7	7	5	5	4	4	5	4	1	1	1	1	1	3
5	1	0	1	3	4	4	5	5	5	4	4	6	4	4	3	3	2	2	0	1	2	2	1	1	3	7
6	1	1	1	1	1	1	3	0	1	1	(CM)	5	6	4	3	3	1	(CM)	1	2	1	0	(CM)	0	1	6
7	1	3	2	1	(CM)	1	0	1	1	2	1	1	1	1	1	0	3	3	1	0	0	0	0	1	1	3
8	0	0	(CM)	0	1	(CM)	0	1	2	2	0	(CM)	0	0	1	0	2	2	2	1	0	(CM)	0	0	1	1
9	1	1	1	0	2	1	1	0	1	0	0	1	1	2	3	4	3	2	1	1	1	0	0	0	1	2
10	(CM)	0	0	(CM)	0	0	0	0	0	0	0	1	1	2	3	3	3	3	1	1	2	0	(CM)	(CM)	1	4
11	(CM)	0	0	0	0	(CM)	0	0	0	0	1	1	1	2	1	2	3	2	1	2	2	0	(CM)	0	1	3
12	1	1	1	2	0	0	0	1	1	1	0	1	2	2	3	2	2	3	0	0	(CM)	1	1	0	1	3
13	1	0	0	3	2	1	1	0	0	(CM)	1	2	3	3	3	4	4	2	2	2	1	(CM)	(CM)	0	1	3
14	(CM)	0	0	1	0	(CM)	(CM)	0	0	(MT)	(MT)	(MT)	(MT)	(MT)	5	4	4	3	1	1	1	2	1	(CM)	2	4
15	0	3	3	1	2	1	1	1	1	2	4	2	1	1	1	1	0	0	0	0	1	1	1	1	2	5
16	4	2	1	1	1	2	1	1	1	1	1	2	2	2	3	2	1	2	0	1	2	3	1	3	1	4
17	2	2	2	3	1	2	0	2	3	2	1	1	2	2	2	2	2	1	1	2	1	3	1	1	2	4
18	0	(CM)	0	1	1	2	1	0	1	2	1	1	2	3	3	3	4	2	2	2	0	1	1	1	2	4
19	2	1	1	1	1	0	(CM)	1	1	1	0	1	1	2	3	2	1	1	1	1	0	0	0	0	1	3
20	0	1	(CM)	1	1	0	(CM)	0	2	1	3	4	5	5	6	5	4	3	4	1	(CM)	0	0	0	1	6
21	1	0	1	1	0	(CM)	1	0	(CM)	0	0	1	1	3	4	3	3	3	(CM)	0	0	0	1	0	1	4
22	1	1	0	1	1	1	1	1	(CM)	0	0	1	2	2	2	3	3	1	1	1	0	1	1	1	1	3
23	0	0	0	0	0	(CM)	1	1	3	1	2	5	4	4	5	4	3	2	3	4	4	4	4	4	3	5
24	2	7	9	7	6	5	3	4	3	6	10	10	11	11	6	6	3	4	4	1	1	2	0	2	5	11
25	2	1	1	3	0	3	4	1	0	1	2	2	2	1	2	3	2	2	1	2	(CM)	1	1	3	2	4
26	2	2	0	2	1	1	1	1	1	1	1	2	1	4	3	4	4	5	2	2	3	0	1	3	5	5
27	0	2	1	1	1	1	1	1	4	3	4	4	6	5	5	4	5	3	2	2	3	4	4	3	2	6
28	4	3	3	5	5	2	3	3	7	8	7	8	9	8	9	7	5	6	7	7	8	7	6	3	6	9
29	4	2	0	1	3	2	3	1	2	5	7	8	6	7	6	6	5	2	2	2	6	4	4	10	4	10
30	6	7	5	4	5	4	9	12	8	9	9	11	5	7	4	5	7	7	6	5	5	3	3	3	6	12
31	4	3	1	3	4	3	2	2	2	0	2	1	3	6	7	7	6	4	4	2	2	2	3	3	3	7
AV	2	2	2	2	2	2	2	2	2	2	2	3	3	4	4	3	3	3	3	2	2	2	2	2	2	2
PK	6	7	9	7	6	5	9	12	8	9	10	11	11	11	9	7	7	7	7	7	8	7	8	10	10	12

WIND SPEED @ 60M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	(CM)	0	(CM)	1	0	1	1	1	2	2	3	4	3	2	1	0	2	1	2	1	4
2	4	3	2	3	2	2	1	2	3	3	4	4	4	3	2	2	4	5	4	1	1	3	1	1	1	3
3	1	1	1	2	1	0	1	2	1	1	1	3	5	4	4	4	4	4	4	2	3	2	1	1	1	5
4	1	1	2	4	4	3	5	4	3	2	2	4	5	6	4	5	4	4	5	3	2	2	2	2	2	5
5	1	1	1	4	1	4	3	5	4	4	4	5	5	4	3	3	3	2	1	2	2	2	1	1	1	6
6	1	1	1	1	1	2	1	2	2	1	0	1	1	1	1	1	1	0	1	2	1	1	0	1	1	5
7	2	1	2	2	1	1	1	1	2	2	2	1	1	1	2	2	3	3	1	2	0	1	1	1	1	3
8	1	1	0	1	1	1	1	2	1	1	1	0	1	1	1	1	1	3	2	1	1	1	1	1	1	3
9	1	1	1	1	1	1	1	0	1	1	1	1	2	2	3	4	4	3	1	2	2	1	1	(CM)	2	2
10	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	2	4	4	2	3	2	1	1	1	1	4
11	1	1	1	1	0	(CM)	(CM)	1	1	0	1	2	3	3	4	5	6	6	4	3	2	1	2	(CM)	2	3
12	2	3	2	2	1	1	2	2	2	(MT)	(MT)	3	(MT)	(MT)	6	1	1	4	3	4	2	2	3	3	2	6
13	1	2	1	0	3	2	2	2	2	(CM)	(MT)	3	3	3	3	3	2	4	3	3	1	2	1	1	2	5
14	(CM)	1	1	2	0	1	1	1	2	(MT)	4	3	2	1	2	2	1	3	3	4	2	2	2	2	2	6
15	2	2	2	1	0	1	1	2	2	2	1	2	2	2	2	1	1	3	1	2	1	1	2	1	2	4
16	4	3	2	2	2	3	2	2	2	(CM)	1	1	2	2	3	2	2	1	2	1	2	3	1	1	2	4
17	1	1	1	2	(CM)	1	1	1	2	2	1	1	2	2	3	2	4	1	2	1	1	1	(CM)	1	1	2
18	0	0	0	0	0	(CM)	1	1	1	1	1	1	2	2	2	2	4	2	1	1	1	0	1	1	1	4
19	2	1	1	1	1	(CM)	(CM)	(CM)	2	2	3	4	4	4	6	5	5	3	4	3	3	1	0	1	1	6
20	0	2	1	1	1	0	0	0	2	2	0	3	2	2	4	3	4	3	1	3	1	(CM)	0	1	1	2
21	1	1	1	1	1	1	0	0	1	1	0	2	1	3	4	3	2	3	1	1	1	0	1	1	1	4
22	1	1	1	0	1	1	2	1	1	1	2	1	2	2	2	2	3	2	3	3	3	2	2	2	1	3
23	2	1	1	0	0	0	2	1	3	1	2	4	4	4	5	6	4	4	5	3	2	2	4	4	3	5
24	3	6	10	8	6	5	3	3	3	5	9	8	8	10	6	6	6	2	2	2	(CM)	1	1	2	2	10
25	3	2	2	3	2	3	4	2	1	1	3	2	2	2	2	3	4	4	2	3	4	3	3	4	4	4
26	2	3	2	2	1	1	1	1	4	3	2	1	5	4	4	4	5	4	2	3	3	3	4	3	5	8
27	4	3	3	5	4	3	3	4	6	7	6	6	8	7	8	6	5	5	7	6	8	8	7	4	4	10
28	4	3	3	1	3	4	3	2	2	4	5	7	6	6	5	6	4	3	2	3	6	5	4	3	6	11
29	4	6	5	5	5	4	8	11	7	8	8	7	5	5	4	5	7	6	6	5	5	4	4	3	4	10
30	6	6	1	1	3	4	3	2	7	4	5	6	6	6	4	6	4	3	2	3	5	4	4	3	6	11
31	4	3	2	3	3	2	2	2	2	1	2	1	3	5	6	6	5	4	4	2	1	3	3	4	3	6
AV	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2
PK	6	6	10	8	6	5	8	11	7	8	9	8	8	10	8	6	7	6	7	6	8	8	8	10	10	11

WIND SPEED @10M

C-B TRACT  
MRI AD42  
JAN 1981

DATA NOT AVAILABLE AT REPORT TIME



C-B TRACT  
MRI AD56  
JAN 1981

WIND SPEED @10M

DATA NOT AVAILABLE AT REPORT TIME

WIND DIRECTION @10M  
DEGREES

CB-TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	100	117	103	111	112	101	106	114	135	(CM)	292	298	287	278	276	281	(CM)	107	103	104	104	99	127	109	112
2	102	123	136	121	115	128	123	141	141	140	114	190	227	233	197	79	123	112	96	98	116	126	138	90	130
3	99	111	90	101	114	98	90	90	112	141	148	297	215	230	207	209	(CM)	111	99	102	105	99	110	100	120
4	109	127	138	132	129	134	138	127	135	137	124	158	208	192	204	207	210	285	274	301	90	112	117	128	150
5	63	309	311	282	281	278	279	287	308	279	286	295	280	284	294	299	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	293
6	(CM)	(CM)	94	95	98	107	101	106	128	142	143	301	308	287	294	308	106	104	111	125	111	100	104	123	108
7	131	115	(CM)	(CM)	101	101	(CM)	102	102	138	300	299	303	294	294	299	115	108	106	105	101	109	104	103	103
8	108	130	127	121	102	129	122	303	(CM)	115	111	111	109	110	(CM)	297	98	106	109	109	134	112	83	117	112
9	114	135	126	90	315	110	123	103	109	137	289	301	297	281	276	275	305	106	99	104	104	129	133	140	120
10	143	140	124	110	100	109	135	129	135	137	128	300	293	287	292	312	309	109	110	98	98	119	111	132	121
11	121	135	107	121	140	138	127	141	141	138	133	298	292	277	281	274	326	106	104	104	106	127	112	133	130
12	143	143	105	110	115	139	140	128	137	(CM)	107	303	291	297	292	273	(CM)	113	104	103	102	104	101	140	123
13	140	116	(CM)	(CM)	(CM)	102	111	138	141	145	294	297	289	281	275	301	292	60	103	99	99	117	110	109	118
14	127	127	144	131	129	115	123	131	(CM)	140	119	285	291	301	191	191	218	99	107	110	109	139	137	130	138
15	136	125	130	141	144	305	305	305	(CM)	137	(CM)	111	117	109	111	119	35	101	(CM)	(CM)	98	108	130	(CM)	115
16	(CM)	101	101	101	101	98	112	(CM)	137	148	(CM)	287	275	265	278	287	16	53	(CM)	109	109	109	100	(CM)	104
17	(CM)	298	(CM)	(CM)	(CM)	127	309	(CM)	(CM)	300	(CM)	292	40	119	125	127	98	104	103	113	108	102	109	114	102
18	107	117	112	110	101	(CM)	(CM)	96	(CM)	122	125	297	280	318	275	294	332	90	107	(CM)	(CM)	(CM)	(CM)	101	96
19	98	110	107	107	107	120	131	121	144	143	140	279	248	308	356	4	39	100	102	101	96	99	105	104	104
20	106	112	109	120	127	(CM)	(CM)	(CM)	(CM)	292	291	275	294	308	325	315	290	30	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	324
21	(CM)	130	130	(CM)	125	135	135	130	130	135	105	285	280	270	270	280	295	76	109	(CM)	105	107	102	112	130
22	114	129	136	139	140	120	(CM)	104	130	141	(CM)	290	281	278	272	269	291	102	101	103	105	107	107	(CM)	130
23	122	(CM)	(CM)	(CM)	(CM)	300	(CM)	300	(CM)	301	294	289	218	168	173	176	201	115	117	133	133	140	140	120	170
24	143	105	112	111	104	114	120	142	141	151	266	246	240	235	293	295	293	283	281	(CM)	27	291	(CM)	60	180
25	93	(CM)	27	19	131	127	101	105	124	134	323	302	276	289	293	269	290	48	112	(CM)	102	106	122	113	88
26	112	100	115	110	111	138	141	141	(CM)	120	(CM)	329	292	285	301	323	19	140	115	106	(CM)	(CM)	129	130	113
27	101	105	103	103	103	110	115	110	110	134	160	190	216	180	176	169	164	127	130	126	130	127	115	110	132
28	118	106	122	122	123	(CM)	105	111	120	168	182	196	199	183	174	149	138	134	127	119	107	125	106	93	135
29	126	123	(CM)	(CM)	153	263	(CM)	(CM)	120	(CM)	184	186	184	204	173	169	168	129	117	117	116	115	120	116	148
30	131	123	125	127	128	88	120	146	137	158	163	161	182	217	234	138	138	195	100	114	113	114	120	(CM)	140
31	(CM)	37	99	99	99	123	131	131	124	138	(CM)	(CM)	301	306	316	309	307	304	297	(CM)	112	112	(CM)	(CM)	82
PV	116	117	113	112	117	119	121	122	129	144	164	276	264	261	262	269	308	102	108	109	106	114	115	114	122

WIND DIRECTION # 10M  
DEGREES

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								PREV
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	(CM)	225	161	158	(CM)	(CM)	(CM)	338	243	(CM)	336	345	345	348	355	230	212	221	239	(CM)	(CM)	225	214	230	253
2	186	164	153	146	127	137	126	143	158	205	221	216	248	240	220	150	166	189	184	104	123	159	161	153	169
3	131	159	170	211	225	211	204	225	230	32	356	285	238	211	225	222	217	211	205	219	199	139	129	124	202
4	120	106	126	107	112	135	161	154	136	68	248	224	210	221	225	208	233	259	241	266	266	137	156	197	181
5	270	248	307	308	314	322	321	321	331	318	314	320	319	310	297	312	322	352	37	307	303	343	294	245	312
6	270	257	239	180	211	213	128	133	112	80	(CM)	337	321	331	303	270	274	(CM)	169	176	227	205	(CM)	180	225
7	215	109	131	209	229	217	222	220	132	118	74	354	311	299	304	299	277	233	231	218	158	(CM)	231	251	226
8	115	157	292	(CM)	212	341	251	243	265	219	25	(CM)	27	12	27	354	315	247	232	109	198	0	101	223	279
9	167	165	188	341	255	225	158	196	233	(CM)	309	349	349	336	297	288	306	294	227	229	191	96	281	(CM)	255
10	(CM)	234	240	270	250	29	338	(CM)	149	135	37	302	309	339	311	327	293	256	232	238	230	221	(CM)	270	274
11	120	265	227	56	(CM)	238	(CM)	(CM)	211	90	41	349	317	349	321	310	298	251	239	229	202	207	203	63	265
12	135	191	272	245	119	192	(CM)	(CM)	(CM)	279	42	0	330	295	294	301	294	279	218	235	236	234	147	(CM)	256
13	221	217	270	252	255	194	241	(CM)	228	(CM)	326	316	288	293	305	323	332	279	262	241	227	180	(CM)	219	260
14	174	139	239	231	228	176	(CM)	245	278	(MT)	(MT)	(MT)	(MT)	(MT)	215	225	212	213	163	96	95	160	183	135	192
15	82	117	139	173	145	133	153	(CM)	210	175	216	216	207	212	19	17	(CM)	28	242	270	230	230	236	260	194
16	246	231	225	235	236	235	226	233	220	265	0	330	320	315	300	280	245	240	235	215	165	165	120	130	241
17	120	175	160	180	200	160	(VA)	105	105	95	105	15	75	100	80	85	90	195	225	215	185	210	(CM)	230	143
18	145	(CM)	250	215	200	240	(VA)	155	(VA)	225	(VA)	315	305	315	325	330	320	320	(VA)	215	225	225	190	210	248
19	230	200	215	225	155	(CM)	225	195	135	85	(VA)	325	330	270	335	350	350	120	200	215	220	195	235	215	222
20	60	165	225	230	120	180	(CM)	110	240	285	300	312	336	348	349	348	342	4	40	242	235	229	233	214	276
21	153	223	190	205	(CM)	233	145	225	(CM)	22	(CM)	303	317	313	311	332	307	278	233	227	171	(CM)	253	161	245
22	156	221	149	217	185	253	180	138	(CM)	66	341	327	309	298	303	297	289	239	230	223	122	140	215	354	234
23	(CM)	217	(CM)	233	141	216	152	236	116	78	243	212	207	202	214	207	213	147	125	135	121	122	158	166	177
24	131	194	203	200	188	178	172	171	166	219	255	235	231	228	262	316	277	278	271	255	7	326	180	185	222
25	192	261	222	230	(CM)	247	284	235	253	305	330	339	336	310	333	347	350	39	168	224	218	117	238	251	271
26	228	242	225	221	229	118	183	248	190	188	355	35	328	272	246	201	199	191	184	209	203	(CM)	166	203	213
27	(CM)	185	180	166	133	98	128	156	208	199	214	216	219	201	215	211	209	199	169	158	176	220	215	199	188
28	194	189	177	200	191	191	193	189	203	192	189	197	202	197	204	188	170	175	163	167	185	189	199	165	188
29	173	168	135	121	270	272	220	259	180	217	221	197	222	217	197	197	180	151	134	120	173	157	175	171	187
30	140	128	107	92	97	119	187	183	178	190	194	194	217	225	218	188	183	205	197	176	182	181	204	280	179
31	240	236	230	228	213	216	187	175	201	199	282	264	312	333	335	341	343	345	341	252	230	233	249	276	257
PV	170	194	201	207	195	202	190	197	195	173	310	300	295	286	289	286	270	241	211	212	198	188	199	206	227



WIND DIRECTION @ 30M  
DEGREES

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								PREV
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	79	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	351	349	(CM)	339	339	341	343	346	219	209	208	251	349	(CM)	220	176	203	297
2	165	151	145	143	121	120	118	126	153	199	213	210	238	234	213	141	159	182	177	139	111	144	158	169	162
3	117	159	153	207	(CM)	174	192	200	207	60	4	276	233	207	219	214	212	200	190	194	199	180	172	163	192
4	169	127	123	128	139	151	149	137	125	68	207	216	202	212	218	201	223	251	233	258	261	145	162	192	180
5	268	304	307	305	310	320	319	319	328	317	312	318	316	310	295	314	325	352	38	317	316	347	327	273	317
6	302	274	263	149	176	229	114	118	131	102	(CM)	335	325	333	301	270	266	(CM)	113	141	193	215	(CM)	141	208
7	203	111	113	152	(CM)	207	27	304	119	119	95	19	310	297	303	297	281	250	262	248	113	(CM)	249	282	253
8	231	110	(CM)	42	157	(CM)	304	83	274	237	31	(CM)	27	14	30	13	321	280	250	53	140	338	55	225	1
9	196	148	200	300	258	257	128	79	210	286	315	344	343	333	297	286	305	321	246	253	223	56	(CM)	(CM)	276
10	(CM)	235	329	(CM)	307	349	6	270	180	125	51	298	307	336	309	325	297	282	270	262	249	235	(CM)	341	298
11	(CM)	349	235	31	22	(CM)	(CM)	34	164	85	38	343	312	346	324	311	305	278	259	258	(CM)	(CM)	210	35	331
12	102	140	281	262	211	98	81	84	115	255	42	3	330	293	288	295	291	309	219	(CM)	(CM)	268	187	109	275
13	213	150	304	266	266	220	234	109	186	(CM)	321	312	284	289	300	321	333	303	302	270	243	(CM)	(CM)	(CM)	274
14	(CM)	84	97	233	225	(CM)	(CM)	315	305	(MT)	(MT)	(MT)	(MT)	(MT)	209	218	205	205	168	182	65	135	188	130	184
15	125	106	127	149	137	100	151	295	215	124	121	121	119	114	59	17	66	39	150	293	259	249	268	269	130
16	249	250	241	256	260	251	241	267	237	(VA)	25	330	320	325	300	285	250	255	280	(VA)	110	120	90	115	267
17	95	110	105	110	120	105	(VA)	85	90	90	85	45	80	95	75	75	90	135	150	135	120	150	5	285	99
18	95	(CM)	285	235	(VA)	270	245	180	(VA)	250	75	285	330	320	325	335	335	340	30	(VA)	150	145	140	120	293
19	150	140	215	240	180	60	(CM)	120	105	85	55	322	354	336	354	354	12	71	147	121	201	281	264	228	100
20	51	119	(CM)	222	94	90	(CM)	129	152	289	306	310	332	343	345	344	342	1	36	53	(CM)	143	153	131	39
21	118	129	119	129	117	(CM)	90	135	(CM)	31	311	300	312	310	310	330	308	311	(CM)	139	56	349	297	166	21
22	99	127	90	125	122	174	142	109	(CM)	78	347	322	306	297	301	294	287	274	253	245	83	94	115	2	83
23	5	131	84	39	59	(CM)	108	118	121	88	136	118	117	115	120	118	126	108	94	95	89	94	117	111	103
24	94	112	113	111	113	124	118	120	119	125	143	133	131	129	148	178	249	274	268	258	357	323	174	118	136
25	125	283	229	232	215	142	165	153	156	295	323	331	331	304	329	341	348	40	130	133	(CM)	103	135	153	197
26	141	149	156	136	139	90	119	152	137	115	351	30	318	266	241	113	114	112	115	120	121	142	118	119	126
27	119	119	119	110	107	85	105	117	118	114	123	124	125	116	124	120	119	121	114	107	118	126	122	115	116
28	115	118	117	114	112	115	124	117	116	115	117	115	116	117	117	120	119	125	119	122	115	115	115	115	117
29	117	118	122	104	150	152	128	153	119	124	126	115	127	125	116	118	119	104	101	94	121	115	122	124	121
30	105	98	82	71	73	87	114	117	120	115	115	117	125	130	127	122	115	120	116	121	120	115	118	158	113
31	140	140	143	142	128	133	124	119	121	124	163	251	306	330	331	338	340	342	342	269	241	239	254	274	200
PV	132	133	147	155	144	137	128	120	146	108	48	335	327	321	308	312	293	284	185	175	144	147	157	155	170

WIND DIRECTION # 60M  
DEGREES

CH-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								PREV
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	140 (VA)	255	265	145	145	(CM)	180	(CM)	20	15	330	320	345	345	345	250	230	220	285	330	210	225	165	195	265
2	165	180	170	175	145	145	140	140	180	200	225	225	255	240	210	155	165	200	195	155	125	165	185	190	180
3	180	205	185	240	345	165	185	210	225	135	(VA)	270	245	215	225	225	225	220	210	210	215	175	210	170	209
4	210	195	165	195	170	180	165	155	140	80	(VA)	205	215	225	230	215	230	260	235	275	270	180	180	220	202
5	300	345	347	305	315	325	330	320	340	325	315	320	320	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	324
6	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	325	345	300	275	280	15	90	135	160	315	0	90	343
7	195	135	120	140	105	220	105	310	140	135	120	100	340	300	300	300	285	270	290	0	150	165	125	300	171
8	265	215	90	35	120	135	60	75	285	250	300	(VA)	0	15	35	30	320	305	260	0	125	285	10	0	356
9	240	165	225	345	300	255	185	110	200	345	315	345	345	340	305	285	180	0	(VA)	290	280	150	110	(CM)	282
10	105	105	135	(VA)	30	5	10	330	285	280	120	65	320	315	345	340	340	315	315	330	300	285	290	165	337
11	(VA)	10	315	265	260	(CM)	(CM)	25	135	120	(VA)	345	320	0	335	325	330	315	300	315	240	120	140	105	330
12	80	110	(VA)	285	255	125	95	100	95	135	105	15	330	315	300	305	290	325	135	85	60	315	210	110	60
13	105	105	75	290	280	270	285	115	115	(CM)	315	315	295	300	315	330	330	335	330	300	280	255	(CM)	(CM)	310
14	(CM)	110	95	140	225	35	75	(VA)	(VA)	(MT)	(MT)	(MT)	(MT)	(MT)	95	90	95	90	80	85	150	20	95	45	90
15	80	330	0	35	50	290	95	115	70	65	90	95	70	45	(VA)	240	325	270	285	210	165	170	165	150	80
16	135	150	150	155	150	145	140	155	135	(CM)	(VA)	195	190	185	180	165	135	150	170	195	20	55	45	50	147
17	5	50	330	35	(CM)	0	75	330	350	0	345	290	335	320	310	315	325	350	135	130	85	110	(CM)	135	4
18	60	15	285	55	(VA)	180	135	155	120	135	325	180	205	210	195	205	215	220	255	255	125	150	195	145	180
19	165	165	150	150	120	(CM)	(CM)	(CM)	5	10	330	195	230	215	220	225	235	290	15	25	45	125	255	135	188
20	195	350	345	(VA)	95	135	120	180	165	175	180	175	200	225	220	210	215	235	270	275	230	(CM)	170	150	195
21	165	140	105	120	90	110	(VA)	330	0	(VA)	165	170	195	180	175	205	180	195	270	340	(CM)	240	215	160	173
22	60	90	350	150	15	(VA)	135	90	110	(VA)	240	180	175	170	170	165	160	165	180	150	105	345	240	215	150
23	215	180	5	315	273	295	12	(VA)	5	0	110	90	95	70	85	80	95	25	0	0	15	10	45	45	33
24	355	73	77	65	60	45	45	45	35	90	125	120	105	105	120	180	150	150	150	135	255	207	170	60	101
25	65	190	140	120	110	123	175	175	168	168	200	220	193	178	193	207	225	270	347	195	(CM)	105	315	153	175
26	163	150	163	153	160	120	145	(VA)	(VA)	40	195	235	243	150	115	70	75	60	47	85	87	87	80	93	118
27	115	100	90	95	47	(VA)	45	75	87	80	78	90	90	75	90	80	80	85	63	15	57	90	90	75	78
28	73	55	60	75	73	75	90	67	75	60	60	65	70	80	80	55	45	43	33	35	60	60	75	45	63
29	60	60	50	45	103	135	103	155	60	90	70	90	95	78	70	65	65	(VA)	17	45	47	45	47	43	70
30	17	5	345	330	330	345	60	63	60	70	75	73	73	100	95	45	63	90	78	60	60	70	73	165	56
31	110	125	135	130	105	120	80	80	95	95	105	125	185	205	207	212	210	215	215	163	135	133	150	160	144
PV	125	114	92	106	94	128	105	99	91	80	91	146	275	240	207	231	222	277	290	17	118	129	141	125	116



WIND DIRECTION @10M

C-B TRACT  
MRI AD42  
JAN 1981

DATA NOT AVAILABLE AT REPORT TIME

WIND DIRECTION @10M

C-B TRACT  
MRI AD56  
JAN 1981

DATA NOT AVAILABLE AT REPORT TIME

TRACT  
AD56  
JAN 1981

WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
10 METER LEVEL

CH-TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	1	2	3	4	5	6	7	8	9	10	HOUR			LOCAL			STANDARD			TIME			16	17	18	19	20	21	22	23	24	VECTOR	
											11	12	13	14	15															DIR	VEL		
1	100	117	103	111	112	101	106	114	135	***	292	298	287	278	276	281	***	107	103	104	104	99	127	109	118	0.3							
2	102	123	136	121	115	128	123	141	141	140	114	190	227	233	197	79	123	112	96	98	116	126	138	90	136	1.5							
3	99	111	90	101	114	98	90	90	112	141	148	297	215	215	230	209	***	111	99	102	105	99	110	100	132	0.7							
4	109	127	138	132	129	134	138	127	135	137	124	158	208	192	204	207	210	285	274	301	90	112	117	128	155	1.2							
5	63	309	311	282	281	278	279	287	308	279	286	295	280	284	294	299	***	***	***	***	***	***	***	***	288	2.2							
6	***	***	94	95	98	107	101	106	128	142	143	301	308	287	294	308	106	104	111	125	111	100	104	123	115	1.1							
7	131	115	***	***	101	101	***	102	102	138	300	299	303	294	294	299	115	108	106	105	101	109	104	103	102	0.5							
8	108	130	127	121	102	129	122	303	***	115	111	111	109	110	***	297	98	106	109	109	134	112	83	117	115	1.3							
9	114	135	126	90	315	110	123	103	109	137	289	301	297	281	276	275	305	106	99	104	104	129	133	140	134	0.6							
10	143	140	124	110	100	109	135	129	135	137	128	300	293	287	292	312	309	109	110	98	98	119	111	132	127	0.6							
11	121	135	107	121	140	138	127	141	141	138	133	298	292	277	281	274	326	106	104	104	106	127	112	133	135	1.2							
12	143	143	105	110	115	139	140	128	137	***	107	303	291	297	292	273	***	113	104	103	102	104	101	140	133	0.9							
13	140	116	***	***	***	102	111	138	141	145	294	297	289	281	275	301	292	60	103	99	99	117	110	109	151	0.4							
14	127	125	144	131	129	115	123	131	***	140	119	285	291	301	191	191	218	99	107	110	109	139	137	130	140	1.1							
15	136	127	130	141	144	305	305	305	***	137	***	111	117	109	111	119	35	101	***	***	98	108	130	***	117	1.0							
16	***	101	101	101	101	98	112	***	137	148	***	287	275	265	278	287	16	53	***	109	109	109	100	***	248	0.1							
17	***	298	***	***	***	127	309	***	***	300	***	292	40	119	125	127	98	104	103	113	108	102	109	114	108	0.8							
18	107	117	112	110	101	***	***	96	***	122	125	297	280	318	275	294	332	90	107	***	***	***	***	101	335	0.2							
19	98	110	107	107	107	120	131	121	144	143	140	279	248	308	356	4	39	100	102	101	96	99	105	104	111	0.9							
20	106	112	109	120	127	***	***	***	***	292	291	275	294	308	325	315	290	30	***	***	***	***	***	***	306	1.1							
21	***	***	130	***	125	135	135	130	130	135	105	285	280	270	270	280	295	76	109	***	105	107	102	112	151	0.7							
22	114	129	136	139	140	120	***	104	130	141	***	290	281	278	272	269	291	102	101	103	105	107	107	***	169	0.5							
23	122	***	***	***	***	300	***	300	***	301	294	289	218	168	173	176	201	115	117	133	133	140	140	120	157	1.1							
24	143	105	112	111	104	114	120	142	141	151	266	246	240	235	293	295	293	283	281	***	27	291	***	60	230	0.9							
25	93	***	27	19	131	127	101	105	124	134	323	302	276	289	293	269	290	48	112	***	102	106	122	113	96	0.2							
26	112	100	115	110	111	138	141	141	***	120	***	329	292	285	301	323	19	140	115	106	***	***	129	130	125	0.4							
27	101	105	103	103	103	110	115	110	110	134	160	190	216	180	176	169	164	127	130	126	130	127	115	110	143	1.1							
28	118	106	122	122	123	***	105	111	120	168	182	196	199	183	174	149	138	134	127	119	107	125	106	93	146	1.8							
29	126	123	***	***	153	263	***	***	120	***	184	186	184	204	173	169	168	129	117	117	116	115	120	116	151	1.7							
30	131	123	125	127	128	88	120	146	137	158	163	161	182	217	234	138	138	195	100	114	113	114	120	***	141	2.2							
31	***	37	99	99	99	123	131	131	124	138	***	***	301	306	316	309	307	304	297	***	112	112	***	***	19	0.2							
VU	124	121	123	119	121	122	127	130	133	145	204	265	263	259	264	265	230	101	110	110	110	117	117	119	137								
VV	1.6	1.4	1.4	1.2	1.1	1.2	1.3	1.1	1.7	1.7	0.5	1.2	1.5	1.5	1.5	1.0	0.1	0.9	0.9	1.5	1.5	1.4	1.4	1.3		0.7							

TOTAL NUMBER OF OBSERVATIONS = 652

NOTE: \*\*\*\* = MISSING DATA

WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
10 METER LEVEL

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																								VECTOR	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL
1	***	225	161	158	***	***	***	338	243	***	336	345	345	348	355	230	212	221	239	***	***	225	214	230	248	0.6
2	186	164	153	146	127	137	126	143	158	205	221	216	248	240	220	150	166	189	184	104	123	159	161	153	179	1.5
3	131	159	170	211	225	211	204	225	230	32	356	285	238	211	225	222	217	211	205	219	199	139	129	124	217	1.2
4	120	106	126	107	112	135	161	154	136	68	248	224	210	221	225	208	233	259	241	266	266	137	156	197	201	1.3
5	270	248	307	308	314	322	321	321	331	318	314	320	319	310	297	312	322	352	37	307	303	343	294	245	317	2.0
6	270	257	239	180	211	243	128	133	112	80	***	337	321	331	303	270	274	***	169	176	227	205	***	180	204	0.4
7	215	109	131	209	229	217	222	220	132	118	74	354	311	299	304	299	277	233	231	218	158	***	231	251	238	0.5
8	115	157	292	***	212	341	251	243	265	219	25	***	27	12	27	354	315	247	232	109	198	0	101	223	248	0.3
9	167	165	188	341	255	225	158	196	233	***	309	349	349	336	297	288	306	294	227	229	191	96	281	***	277	0.6
10	***	234	240	270	250	29	338	***	149	135	37	302	309	339	311	327	293	256	232	238	230	221	***	270	283	0.7
11	120	265	227	56	***	238	***	***	211	90	41	349	317	349	321	310	298	251	239	229	202	207	203	63	275	0.4
12	135	191	272	245	119	192	***	***	***	279	42	0	330	295	294	301	294	279	218	235	236	234	147	***	271	0.6
13	221	217	270	252	255	194	241	***	228	***	326	316	288	293	305	323	332	279	262	241	227	180	***	219	279	1.1
14	174	139	239	231	228	176	***	245	278	***	***	***	***	***	215	225	212	213	163	96	95	160	183	135	202	0.9
15	82	117	139	173	145	133	153	***	210	175	216	216	207	212	19	17	***	28	242	270	230	230	236	260	198	0.6
16	246	231	225	235	236	235	226	233	220	265	0	330	320	315	300	280	245	240	235	215	165	165	120	130	247	0.8
17	120	175	160	180	200	160	***	105	105	95	105	15	75	100	80	85	90	195	225	215	185	210	***	230	140	0.8
18	145	***	250	215	200	240	***	155	***	225	***	315	305	315	325	330	320	320	***	215	225	225	190	210	280	0.9
19	230	200	215	225	155	***	225	195	135	85	***	325	330	270	335	350	350	120	200	215	220	195	235	215	246	0.5
20	60	165	225	230	120	180	***	110	240	285	300	312	336	348	349	348	342	4	40	242	235	229	233	214	327	1.0
21	153	223	190	205	***	233	145	225	***	22	***	303	317	313	311	332	307	278	233	227	171	***	253	161	283	0.7
22	156	221	149	217	185	253	180	138	***	66	341	327	309	298	303	297	289	239	230	223	122	140	215	354	264	0.6
23	***	217	***	233	141	216	152	236	116	78	243	212	207	202	214	207	213	147	125	135	121	122	158	166	181	1.4
24	131	194	203	200	188	178	172	171	166	219	255	235	231	228	262	316	277	278	271	255	7	326	180	185	228	2.7
25	192	261	222	230	***	247	284	235	253	305	330	339	336	310	333	347	350	39	168	224	218	117	238	251	286	0.6
26	228	242	225	221	229	118	183	248	190	188	355	35	328	272	246	201	199	191	184	209	203	***	166	203	216	1.0
27	***	185	180	166	133	98	128	156	208	199	214	216	219	201	215	211	209	199	169	158	176	220	215	199	201	1.8
28	194	189	177	200	191	191	193	189	203	192	189	197	202	197	204	188	170	175	163	167	185	189	199	165	190	4.0
29	173	168	135	121	270	272	220	259	180	217	221	197	222	217	197	197	180	151	134	120	173	157	175	171	193	2.6
30	140	128	107	92	97	119	187	183	178	190	194	194	217	225	218	188	183	205	197	176	182	181	204	280	182	3.5
31	240	236	230	228	213	216	187	175	201	199	282	264	312	333	335	341	343	345	341	252	230	233	249	276	293	1.2
VD	182	185	191	206	195	202	194	186	186	202	241	248	260	261	268	272	257	231	213	208	190	189	197	202	221	
VV	0.8	0.9	0.8	0.9	0.7	0.6	0.9	0.9	0.9	0.8	1.0	1.2	1.5	1.6	1.5	1.2	1.1	1.0	1.2	1.0	1.0	0.9	1.1	0.8		0.9

TOTAL NUMBER OF OBSERVATIONS = 688

NOTE: \*\*\* = MISSING DATA



WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
30 METER LEVEL

CR-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																								VECTOR	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL
1	79	***	***	***	***	***	***	351	349	***	339	339	341	343	346	219	209	208	251	349	***	220	176	203	251	0.7
2	165	151	145	143	121	120	118	126	153	199	213	210	238	234	213	141	159	182	177	139	111	144	158	169	169	2.2
3	117	159	153	207	***	174	192	200	207	60	4	276	233	207	219	214	212	200	190	194	199	180	172	163	207	1.8
4	169	127	123	128	139	151	149	137	125	68	207	216	202	212	218	201	223	251	233	258	261	145	162	192	195	2.1
5	268	304	307	305	310	320	319	319	328	317	312	318	316	310	295	314	325	352	38	317	316	347	327	273	317	2.8
6	302	274	263	149	176	229	114	118	131	102	***	335	325	333	301	270	266	***	113	141	193	215	***	141	163	0.3
7	203	111	113	152	***	207	27	304	119	119	95	19	310	297	303	297	281	250	262	248	113	***	249	282	243	0.3
8	231	110	***	42	157	***	304	83	274	237	31	***	27	14	30	13	321	280	250	53	140	338	55	225	290	0.3
9	196	148	200	300	258	257	128	79	210	286	315	344	343	333	297	286	305	321	246	253	223	56	***	***	284	0.8
10	***	235	329	***	307	349	6	270	180	125	51	298	307	336	309	325	297	282	270	262	249	235	***	341	299	0.9
11	***	349	235	31	22	***	***	34	164	85	38	343	312	346	324	311	305	278	259	258	***	***	210	35	306	0.7
12	102	140	281	262	211	98	81	84	115	255	42	3	330	293	288	295	291	309	219	***	***	268	187	109	286	0.5
13	213	150	304	266	266	220	234	109	186	***	321	312	284	289	300	321	333	303	302	270	243	***	***	***	290	1.5
14	***	84	97	233	225	***	***	315	305	***	***	***	***	***	209	218	205	205	168	182	65	135	188	130	195	1.3
15	125	106	127	149	137	100	151	295	215	124	121	121	119	114	59	17	66	39	150	293	259	249	268	269	129	0.7
16	249	250	241	256	260	251	241	267	237	***	25	330	320	325	300	285	250	255	280	***	110	120	90	115	269	0.9
17	95	110	105	110	120	105	***	85	90	90	85	45	80	95	75	75	90	135	150	135	120	150	5	285	100	1.5
18	95	***	285	235	***	270	245	180	***	250	75	285	330	320	325	335	335	340	30	***	150	145	140	120	319	0.8
19	150	140	215	240	180	60	***	120	105	85	55	322	354	336	354	354	12	71	147	121	201	281	264	228	48	0.2
20	51	119	***	222	94	90	***	129	152	289	306	310	332	343	345	344	342	1	36	53	***	143	153	131	347	1.5
21	118	129	119	129	117	***	90	135	***	31	311	300	312	310	310	330	308	311	***	139	56	349	297	166	321	0.6
22	99	127	90	125	122	174	142	109	***	78	347	322	306	297	301	294	287	274	253	245	83	94	115	2	292	0.3
23	5	131	84	39	59	***	108	118	121	88	136	118	117	115	120	118	126	108	94	95	89	94	117	111	110	2.5
24	94	112	113	111	113	124	118	120	119	125	143	133	131	129	148	178	249	274	268	258	357	323	174	118	132	3.8
25	125	283	229	232	215	142	165	153	156	295	323	331	331	304	329	341	348	40	130	133	***	103	135	153	188	0.1
26	141	149	156	136	139	90	119	152	137	115	351	30	318	266	241	113	114	112	115	120	121	142	118	119	125	1.2
27	119	119	119	110	107	85	105	117	118	114	123	124	125	116	124	120	119	121	114	107	118	126	122	115	118	2.9
28	115	118	117	114	112	115	124	117	116	115	117	115	116	117	117	120	119	125	119	122	115	115	115	117	5.7	5.7
29	117	118	122	104	150	152	128	153	119	124	126	115	127	125	116	118	119	104	101	94	121	115	122	124	121	4.3
30	105	98	82	71	73	87	114	117	120	115	115	117	125	130	127	122	115	120	116	121	120	115	118	158	112	6.0
31	140	140	143	142	128	133	124	119	121	124	163	251	306	330	331	338	340	342	342	269	241	239	254	274	320	0.7
VD	134	124	125	141	126	136	131	120	126	118	118	109	149	209	276	276	273	210	173	148	128	126	134	138	132	
VV	1.1	1.4	1.0	0.9	0.9	0.8	1.2	1.1	1.3	1.2	1.2	0.7	0.3	0.1	0.4	0.2	0.3	0.3	0.7	0.7	1.2	1.0	1.1	1.0		0.7

TOTAL NUMBER OF OBSERVATIONS = 686

NOTE: \*\*\*\* = MISSING DATA



WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
60 METER LEVEL

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																								VECTOR	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL
1	140	***	255	265	145	***	180	***	20	15	330	320	345	345	345	250	230	220	285	330	210	225	165	195	257	0.7
2	185	180	170	175	145	145	140	140	180	200	225	225	255	240	210	155	165	200	195	155	125	165	185	190	188	2.2
3	180	205	185	240	345	165	185	210	225	135	***	270	245	215	225	225	225	220	210	210	215	175	210	170	218	2.1
4	210	195	165	195	170	180	165	155	140	80	***	205	215	225	230	215	230	260	235	275	270	180	180	220	208	2.5
5	300	345	347	305	315	325	330	320	340	325	315	320	320	***	***	***	***	***	***	***	***	***	***	***	323	3.7
6	***	***	***	***	***	***	***	***	***	***	***	***	325	345	300	275	280	15	90	135	160	315	0	90	349	0.2
7	195	135	120	140	105	220	105	310	140	135	120	100	340	300	300	300	285	270	290	0	150	165	125	300	193	0.3
8	265	215	90	35	120	135	60	75	285	250	300	***	0	15	35	30	320	305	260	0	125	285	10	0	327	0.4
9	240	165	225	345	300	255	185	110	200	345	315	345	340	305	345	285	180	0	***	290	280	150	110	***	289	0.7
10	105	105	135	***	30	5	10	330	285	280	120	65	320	315	345	340	340	315	315	330	300	285	290	165	334	1.1
11	***	10	315	265	260	***	***	25	135	120	***	345	320	0	335	325	330	315	300	315	240	120	140	105	327	0.9
12	80	110	***	285	255	125	95	100	95	135	105	15	330	315	300	305	290	325	135	85	60	315	210	110	360	0.3
13	105	105	75	290	280	270	285	115	115	***	315	315	295	300	315	330	330	335	330	300	280	255	***	***	314	1.6
14	***	110	95	140	225	35	75	***	***	***	***	***	***	***	95	90	95	90	80	85	150	20	95	45	87	2.2
15	80	330	0	35	50	290	95	115	70	65	90	95	70	45	***	240	325	270	285	210	165	170	165	150	84	0.7
16	135	150	150	155	150	145	140	155	135	***	***	195	190	185	180	165	135	150	170	195	20	55	45	50	144	1.5
17	5	50	330	35	***	0	75	330	350	0	345	290	335	320	310	315	325	350	135	130	85	110	***	135	360	0.8
18	60	15	285	55	***	180	135	155	120	135	325	180	205	210	195	205	215	220	255	255	125	150	195	145	193	1.0
19	165	165	150	150	120	***	***	***	5	10	330	195	230	215	220	225	235	290	15	25	45	125	255	135	202	0.4
20	195	350	345	***	95	135	120	180	165	175	180	175	200	225	220	210	215	235	270	275	230	***	170	150	212	1.7
21	165	140	105	120	90	110	***	330	0	***	165	170	195	180	175	205	180	195	270	340	***	240	215	160	177	1.0
22	60	90	350	150	15	***	135	90	110	***	240	180	175	170	170	165	160	165	180	150	105	345	240	215	159	0.8
23	215	180	5	315	273	295	12	***	5	0	110	90	95	70	85	80	95	25	0	0	15	10	45	45	52	1.8
24	355	73	77	65	60	45	45	45	35	90	125	120	105	105	120	180	150	150	150	135	255	207	170	60	99	3.7
25	65	190	140	120	110	123	175	175	168	168	200	220	193	178	193	207	225	270	347	195	***	105	315	153	173	1.3
26	163	150	163	153	160	120	145	***	***	40	195	235	243	150	115	70	75	60	47	85	87	87	80	93	105	1.8
27	115	100	90	95	47	***	45	75	87	80	78	90	90	75	90	80	80	85	63	15	57	90	90	75	81	3.0
28	73	55	60	75	73	75	90	67	75	60	60	65	70	80	80	55	45	43	33	35	60	60	75	45	62	5.4
29	60	60	50	45	103	135	103	155	60	90	70	90	95	78	70	65	65	***	17	45	47	45	47	43	68	3.9
30	17	5	345	330	330	345	60	63	60	70	75	73	73	100	95	45	63	90	78	60	60	70	73	165	56	4.7
31	110	125	135	130	105	120	80	80	95	95	105	125	185	205	207	212	210	215	215	163	135	133	150	160	163	2.1
VD	104	99	80	82	67	105	98	83	77	78	93	109	126	143	144	189	161	257	264	39	68	80	97	102	96	
VV	0.8	1.0	0.7	0.5	0.7	0.4	1.0	1.0	1.1	1.3	1.1	0.9	0.3	0.7	0.7	0.4	0.5	0.4	0.2	0.5	0.8	0.7	1.0	1.2	0.6	

TOTAL NUMBER OF OBSERVATIONS = 674

NOTE: \*\*\*\* = MISSING DATA

SIGMA HORIZ. WIND DIR. #10M  
DEGREES

CB-TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	9	10	9	9	10	9	10	11	16	(CM)	24	11	11	8	7	8	(CM)	5	5	5	7	12	13	10	10	24
2	10	10	10	11	13	13	17	9	5	6	12	18	22	23	14	10	8	8	7	6	7	8	9	7	11	23
3	11	8	8	8	9	10	9	12	9	7	16	15	17	21	17	16	(CM)	5	6	6	9	7	9	11	11	21
4	11	12	6	4	10	9	7	10	7	7	6	10	17	20	19	19	17	(CM)	24	7	15	8	4	5	11	24
5	2	11	4	8	9	7	9	7	11	6	7	11	7	8	8	17	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	8	17
6	(CM)	(CM)	10	5	5	6	6	6	3	5	5	11	8	6	6	3	9	4	6	7	5	5	8	7	6	11
7	10	9	(CM)	(CM)	5	7	(CM)	10	7	15	7	7	5	4	2	1	9	3	4	6	7	10	6	4	7	15
8	8	10	11	9	10	10	12	13	(CM)	2	1	0	1	1	(CM)	2	6	4	6	7	8	9	9	5	7	13
9	8	9	13	17	8	6	8	9	9	11	3	4	5	6	6	6	9	5	4	5	6	10	12	9	8	17
10	5	10	10	10	8	9	10	11	10	8	3	8	5	6	13	7	9	5	3	3	5	8	10	10	8	13
11	11	9	9	9	9	10	11	6	6	6	9	8	8	8	7	6	8	6	4	5	8	11	9	10	8	11
12	5	6	8	5	8	7	7	12	9	(CM)	3	12	9	7	8	10	(CM)	4	4	5	4	6	9	7	7	12
13	6	10	(CM)	(CM)	(CM)	7	7	7	6	7	14	8	8	8	7	11	11	9	5	4	5	8	9	9	8	14
14	11	10	6	11	13	8	12	14	(CM)	8	7	12	9	10	16	13	11	9	7	11	10	6	8	9	10	16
15	11	12	10	12	15	16	7	5	(CM)	9	(CM)	4	6	5	2	0	5	8	(CM)	(CM)	4	7	10	(CM)	8	16
16	(CM)	5	6	6	6	5	9	(CM)	8	6	(CM)	13	10	8	10	11	7	6	(CM)	4	4	6	13	(CM)	8	13
17	(CM)	10	(CM)	(CM)	(CM)	10	24	(CM)	(CM)	7	(CM)	3	5	6	3	2	2	4	6	8	8	7	7	8	7	24
18	10	11	8	9	9	(CM)	(CM)	8	(CM)	9	3	12	11	24	14	19	15	21	8	(CM)	(CM)	(CM)	(CM)	6	12	24
19	6	5	7	8	11	11	12	12	5	5	5	15	17	23	25	23	12	7	7	7	8	7	7	9	11	25
20	9	12	9	8	12	(CM)	(CM)	(CM)	(CM)	32	10	8	17	23	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	( )	32
21	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	16	12	14	6	(CM)	6	7	6	8	( )	16
22	12	11	6	11	7	11	(CM)	7	12	7	(CM)	11	8	9	8	6	8	10	4	5	6	11	13	(CM)	9	13
23	8	(CM)	(CM)	(CM)	(CM)	17	(CM)	12	(CM)	22	9	10	18	19	17	18	23	12	11	11	7	5	9	21	14	23
24	20	12	8	6	7	11	10	8	7	20	17	18	21	24	10	9	12	16	20	(CM)	12	12	(CM)	5	13	24
25	11	(CM)	8	13	8	9	7	5	8	5	13	15	17	14	23	11	11	10	7	(CM)	6	7	11	19	11	23
26	7	8	8	10	7	8	5	15	(CM)	8	(CM)	14	14	19	16	15	5	12	7	10	(CM)	(CM)	5	3	10	19
27	15	7	8	7	7	5	7	8	10	7	11	18	21	17	18	16	21	6	7	9	7	8	4	3	10	21
28	3	4	9	5	10	(CM)	7	10	7	23	19	20	21	20	22	14	12	8	9	10	15	16	10	16	13	23
29	13	8	(CM)	(CM)	18	7	(CM)	(CM)	7	(CM)	12	18	18	22	19	20	15	6	9	7	11	10	14	11	13	22
30	6	6	10	11	14	16	25	15	11	18	21	22	23	26	26	11	13	26	12	9	11	8	8	(CM)	15	26
31	(CM)	10	10	6	5	7	7	7	10	5	(CM)	(CM)	8	14	15	17	14	17	15	(CM)	4	3	(CM)	(CM)	10	17
AV	9	9	8	9	9	9	10	10	8	10	10	12	12	14	13	11	11	9	8	7	8	8	9	9	10	32
PK	20	12	13	17	18	17	25	15	16	32	24	22	23	26	26	23	23	26	24	11	15	16	14	21		

SIGMA HORIZ. WIND DIR. # 10M  
DEGREES

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(CM)	5	14	12	(CM)	(CM)	(CM)	14	12	(CM)	18	18	16	12	11	19	5	3	7	(CM)	(CM)	20	11	22	13	22
2	8	8	10	5	8	9	9	7	6	16	9	11	17	15	10	12	10	5	7	16	6	5	6	11	9	17
3	7	5	5	5	9	10	11	7	18	17	14	18	11	12	12	13	7	4	4	19	13	19	19	12	11	19
4	15	13	6	6	12	7	6	7	11	14	29	25	11	12	12	12	10	7	9	7	16	10	15	11	12	29
5	5	8	8	6	7	8	8	8	8	7	7	8	8	10	8	8	12	8	9	20	8	9	7	5	8	20
6	5	5	4	8	6	10	9	4	6	9	(CM)	14	15	15	10	12	5	(CM)	5	5	5	6	(CM)	9	8	15
7	10	7	9	11	12	9	13	10	6	7	13	12	8	8	9	7	4	4	7	9	9	(CM)	18	9	9	18
8	7	7	14	(CM)	10	15	10	11	10	11	18	(CM)	26	25	19	22	4	6	4	12	8	15	10	11	13	26
9	17	11	22	24	8	13	6	11	17	(CM)	18	15	12	10	8	9	5	7	4	6	11	13	13	(CM)	12	24
10	(CM)	9	11	10	8	13	13	(CM)	12	12	15	18	17	13	12	8	6	7	7	4	8	10	(CM)	12	11	18
11	16	15	6	7	(CM)	6	(CM)	(CM)	8	11	19	16	15	15	17	10	6	5	5	5	8	4	7	14	10	19
12	11	9	8	5	9	12	(CM)	(CM)	(CM)	14	18	16	14	12	8	8	4	4	3	7	7	9	6	(CM)	9	18
13	13	12	20	4	9	14	18	(CM)	8	(CM)	14	10	11	11	11	8	5	9	12	5	7	11	(CM)	8	10	20
14	15	13	11	11	5	7	(CM)	10	13	(MT)	(MT)	(MT)	(MT)	(MT)	11	11	8	21	13	30	12	4	11	11	12	30
15	19	7	5	9	5	4	13	(CM)	18	10	9	13	39	29	26	21	(CM)	16	20	9	4	11	6	5	14	39
16	5	4	3	4	4	3	4	5	4	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	( )	5
17	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	( )	( )
18	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	( )	( )
19	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	( )	( )
20	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	( )	( )
21	8	7	8	7	(CM)	12	24	11	(CM)	23	(CM)	20	32	15	11	9	6	5	6	18	6	5	7	6	9	18
22	7	7	11	13	8	10	10	13	(CM)	12	31	14	13	13	11	10	6	9	8	6	15	(CM)	8	14	13	32
23	(CM)	8	(CM)	13	13	11	13	13	6	14	21	12	13	12	11	13	4	4	4	5	11	11	10	14	11	31
24	23	13	6	5	5	6	7	5	9	12	11	12	11	10	14	10	11	14	11	17	12	15	18	7	11	23
25	12	12	4	8	(CM)	11	8	13	12	32	31	28	28	33	29	17	8	10	6	7	8	18	12	6	15	33
26	5	4	8	4	17	8	10	9	10	28	31	20	33	15	16	10	9	8	12	12	18	(CM)	40	13	15	40
27	(CM)	36	31	13	10	7	7	12	8	12	13	13	10	12	14	11	9	18	10	12	16	13	13	12	14	36
28	13	13	15	9	8	13	12	24	11	11	12	13	11	13	11	10	11	6	7	7	8	8	10	20	12	24
29	14	11	24	10	10	11	8	12	10	9	9	13	11	13	14	14	12	12	17	20	10	19	11	7	13	24
30	7	6	12	11	8	21	9	9	9	10	10	12	18	11	12	11	7	8	7	6	5	7	12	12	10	21
31	10	11	16	5	4	5	6	6	11	20	13	15	10	9	8	8	8	7	6	7	4	5	9	11	9	20
AV	11	10	11	9	8	10	10	10	10	14	17	15	16	14	13	11	8	8	8	11	9	11	12	11	11	
PK	23	36	31	24	17	21	24	24	18	32	31	28	39	33	29	22	17	21	20	30	18	20	40	22		40



SIGMA HORIZ. WIND DIR. @ 30M  
DEGREES

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 AVE PEAK

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	12	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	12	10	(CM)	17	19	14	10	10	28	4	4	7	14	(CM)	27	15	31	15	31
2	4	6	6	5	7	8	8	4	5	14	9	10	15	14	9	10	10	4	5	17	3	4	6	14	8	17
3	6	9	4	5	(CM)	12	11	5	25	22	17	16	10	11	10	11	5	2	2	20	8	21	26	14	12	26
4	32	20	6	15	17	9	5	5	8	12	31	28	10	11	10	12	9	5	7	6	14	8	13	7	13	32
5	5	21	13	5	6	6	8	7	7	6	6	6	6	9	7	8	11	6	11	11	6	4	9	10	8	21
6	8	5	6	9	5	25	8	4	4	12	(CM)	13	17	16	10	13	6	(CM)	7	3	13	17	(CM)	27	11	27
7	14	8	4	12	(CM)	11	12	18	6	4	10	15	8	7	7	6	3	5	9	30	8	(CM)	43	9	11	43
8	33	7	(CM)	14	13	(CM)	19	13	10	10	29	(CM)	18	19	15	12	4	6	4	11	9	23	17	11	14	33
9	7	16	16	23	12	14	7	7	10	22	28	13	11	8	7	8	5	9	11	8	9	15	(CM)	(CM)	12	28
10	(CM)	13	22	(CM)	36	8	10	12	9	10	12	17	15	11	11	7	6	7	13	5	8	23	(CM)	9	13	36
11	(CM)	21	25	20	6	(CM)	(CM)	11	9	9	14	13	14	14	17	11	5	5	7	10	(CM)	(CM)	6	9	12	25
12	6	8	9	6	12	25	5	7	8	13	18	12	13	10	7	7	4	19	7	7	7	7	8	11	10	25
13	29	23	18	4	5	5	16	9	18	(CM)	20	10	10	9	10	6	4	7	12	7	7	(CM)	(CM)	11	10	25
14	(CM)	9	10	17	23	(CM)	(CM)	18	15	(MT)	(MT)	10	9	(MT)	9	9	7	22	17	31	21	4	20	16	31	
15	40	4	4	6	5	11	12	20	13	8	4	6	19	18	19	16	12	10	12	19	11	14	9	4	12	40
16	5	7	6	6	6	4	7	6	5	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	( )	7
17	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	( )	( )
18	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	( )	( )
19	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	(PF)	( )	( )
20	12	6	(CM)	14	7	18	(CM)	8	5	16	11	9	10	12	8	11	7	6	6	29	20	15	21	13	17	30
21	4	4	4	6	8	(CM)	8	15	(CM)	19	35	16	33	13	10	8	5	4	4	19	(CM)	10	13	4	10	19
22	4	7	13	14	6	4	5	8	(CM)	12	19	15	11	11	10	7	6	6	9	21	6	15	7	12	12	35
23	17	11	7	15	14	(CM)	6	15	5	18	21	6	7	7	5	6	8	10	6	5	4	5	7	10	9	21
24	11	6	3	3	6	4	5	2	4	6	5	6	5	5	7	5	12	8	11	17	11	15	21	9	8	21
25	7	15	6	7	23	4	3	11	17	33	21	21	28	38	27	16	7	7	6	8	(CM)	9	8	3	14	38
26	4	2	21	4	5	5	5	7	6	19	26	14	29	12	19	6	6	7	8	6	7	51	25	11	13	51
27	32	9	16	10	11	14	13	8	4	7	7	6	5	7	7	5	4	8	7	7	7	7	7	8	9	32
28	8	7	9	5	7	10	8	13	6	8	9	7	6	8	6	9	8	5	4	5	10	9	6	15	8	15
29	10	7	13	8	4	5	4	14	9	4	5	7	5	7	8	8	8	9	11	13	8	9	9	5	8	14
30	4	3	7	6	4	9	9	10	9	8	7	7	10	5	6	7	10	4	4	6	10	6	7	6	7	10
31	5	4	12	2	2	2	3	5	6	11	8	21	10	8	8	7	7	6	4	10	5	5	9	9	7	21
AV	13	10	10	9	10	10	8	10	9	13	16	13	13	12	10	10	7	7	8	12	9	13	13	11	11	51
PK	40	23	25	23	36	25	19	20	25	33	35	28	33	38	27	28	12	22	21	31	21	51	43	31		

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

[illegible]



TEMPERATURE  
DEGREE C

CB-TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	-4	-4	-4	-5	-6	-6	-6	-6	-4	-2	2	6	9	11	12	11	7	2	0	-1	-1	-2	-2	-2	0	12
2	-2	-2	-3	-2	-2	-2	-2	-2	1	2	7	11	12	12	11	12	11	11	8	3	3	1	1	1	3	12
3	1	0	-1	-1	-2	-3	-3	-3	-2	1	7	9	11	11	11	11	9	4	3	1	1	1	1	1	3	11
4	-2	-2	-2	-1	-1	-1	0	-1	1	3	6	9	11	11	12	12	10	8	7	6	4	3	2	2	4	12
5	-2	2	1	1	1	2	2	1	-1	-1	-1	-1	-2	-1	-1	-1	0	-1	-1	-1	-1	-1	-1	-2	0	2
6	-2	-2	-4	-7	-9	-10	-10	-8	-7	-6	-4	-2	1	2	2	2	-1	-3	-4	-6	-7	-8	-8	-9	-5	2
7	-8	-9	-11	-11	-12	-11	-12	-13	-11	-8	-6	-1	2	4	6	6	2	-2	-3	-4	-6	-7	-7	-8	-5	6
8	-9	-9	-9	-11	-11	-11	-11	-14	-13	-10	-5	1	4	7	7	7	2	-1	-3	-4	-4	-6	-6	-11	-5	7
9	-8	-7	-7	-7	-8	-8	-7	-7	-8	-4	-1	3	6	7	8	8	6	1	-2	-3	-4	-4	-4	-6	-3	8
10	-6	-6	-7	-7	-9	-10	-11	-11	-9	-3	0	3	6	8	8	8	6	1	-2	-3	-4	-6	-6	-7	-2	8
11	-7	-8	-9	-9	-10	-11	-11	-11	-9	-6	-2	2	4	6	7	7	4	-1	-3	-4	-6	-7	-7	-8	-4	7
12	-8	-8	-9	-10	-11	-11	-12	-12	-13	-7	-3	0	4	6	6	6	4	0	-2	-4	-6	-7	-7	-7	-4	6
13	-8	-8	-11	-13	-13	-11	-11	-11	-11	-6	-1	-3	3	6	6	9	5	1	-3	-4	-6	-7	-7	-8	-5	7
14	-9	-9	-9	-10	-11	-11	-11	-11	-11	-6	-1	2	5	8	10	9	7	1	-2	-3	-4	-6	-7	-8	-3	10
15	-6	-6	-6	-6	-6	-7	-8	-7	-6	-2	0	2	4	6	8	8	6	2	-2	-4	-5	-5	-6	-6	-5	8
16	-6	-8	-8	-9	-9	-10	-9	-9	-8	-6	-2	0	1	2	3	3	3	0	-1	-3	-3	-2	-3	-5	-2	3
17	-4	-4	-4	-6	-6	-4	-6	-5	-3	-2	1	4	7	7	7	6	3	-1	-1	-2	-3	-4	-4	-6	-1	7
18	-6	-6	-7	-7	-7	-8	-9	-9	-7	-4	1	4	7	8	8	8	7	2	-2	-4	-8	-2	-6	-6	-2	8
19	-7	-7	-7	-8	-8	-9	-9	-9	-7	-4	1	4	6	7	8	8	6	0	-2	-4	-6	-6	-6	-7	-3	8
20	-7	-7	-8	-8	-8	-7	-7	-7	-6	-2	2	4	7	7	6	6	6	2	-4	-5	-6	-8	-8	-9	-3	7
21	-10	-9	-10	-10	-10	-11	-11	-11	-10	-6	-1	2	5	6	7	9	7	2	-2	-3	-4	-5	-6	-6	-4	9
22	-7	-7	-7	-7	-7	-8	-11	-9	-8	-4	2	5	6	9	11	11	9	2	-1	-3	-4	-4	-5	-6	-2	11
23	-6	-7	-9	-11	-10	-12	-12	-13	-8	-4	1	6	3	13	13	11	10	5	3	2	1	2	2	2	-1	13
24	2	2	-1	-1	-2	-3	-6	-4	-3	3	7	6	7	7	4	3	2	2	2	-1	-2	-2	-2	-2	-1	7
25	-3	-4	-5	-6	-6	-6	-9	-9	-8	-5	-2	-1	1	2	3	3	2	-1	-4	-6	-7	-8	-9	-10	-4	3
26	-12	-12	-13	-13	-13	-12	-11	-11	-11	-9	-3	-2	-7	1	1	0	-1	-1	-2	-3	-3	-4	-3	-3	-6	1
27	-5	-6	-6	-6	-6	-7	-7	-6	-6	-2	2	3	3	4	4	4	4	3	2	2	2	2	2	2	-1	4
28	2	2	2	2	2	2	1	1	2	6	6	6	7	7	7	7	6	2	1	2	2	3	3	3	3	7
29	3	1	0	-1	-1	-1	-4	-2	-2	-2	3	4	3	4	4	4	4	2	1	1	2	2	3	3	1	4
30	3	2	2	3	2	3	1	2	4	4	4	4	2	1	-1	-2	-1	-2	-2	-3	-10	-4	-5	-6	0	4
31	-5	-6	-8	-9	-12	-11	-9	-8	-7	-7	-6	-4	-11	-3	-3	-4	-4	-5	-6	-6	-8	-8	-7	-7	-7	-3
AV	-5	-5	-6	-6	-7	-7	-7	-7	-6	-3	0	3	4	6	6	6	5	1	-1	-2	-3	-3	-4	-4	-2	13
PK	3	2	2	3	2	3	2	2	4	6	7	11	12	13	13	12	11	8	7	6	4	3	3	3	3	
MN	-12	-12	-13	-13	-13	-12	-12	-14	-13	-9	-6	-4	-11	-3	-3	-4	-4	-5	-6	-6	-10	-8	-9	-11		

MONTHLY MINIMUM = -14

TEMPERATURE @ 10M  
DEGREE C

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	2	1	1	0	-1	-1	-1	-1	-1	0	2	5	7	9	9	11	9	7	4	4	4	3	3	2	3	11
2	3	3	3	3	2	2	1	1	1	6	6	7	8	8	8	8	7	6	4	3	2	2	3	3	3	4
3	4	3	3	2	2	2	2	2	2	4	5	7	8	8	8	8	7	4	4	2	2	3	3	2	4	8
4	1	1	1	1	-2	-3	-3	-3	-2	-4	6	7	8	-4	-4	-3	-3	6	4	3	2	1	1	1	4	8
5	-1	-1	-1	-4	-6	-7	-8	-9	-4	-4	-5	-4	-4	-4	-1	-1	-1	-2	-2	-3	-3	-3	-3	-3	-3	-1
6	-3	-4	-4	-4	-6	-6	-6	-6	-8	-7	-5	-3	-2	-1	-1	-1	-1	-2	-2	-3	-4	-4	-4	-5	-4	-1
7	-3	-4	-4	-6	-4	-4	-5	-7	-4	-2	1	1	1	3	3	3	3	1	0	0	-1	-2	-3	-4	-2	3
8	-4	-4	-4	-6	-4	-4	-5	-7	-4	-6	-3	0	3	4	5	5	4	3	2	1	0	-1	-2	-2	-1	6
9	-2	-1	-1	-2	-7	-7	-6	-4	-4	-3	0	2	3	4	5	6	4	3	2	1	0	-1	-2	-2	0	5
10	-2	-2	-2	-3	-3	-4	-4	-3	-4	-2	0	2	4	5	6	6	4	3	2	1	0	-2	-2	-2	0	6
11	-3	-4	-4	-5	-5	-5	-5	-6	-5	-4	-1	1	2	3	4	4	3	1	-1	-1	-2	-2	-2	-4	-2	4
12	-4	-3	-7	-6	-6	-6	-6	-6	-6	-5	-3	0	2	3	3	3	3	2	0	0	-1	-3	-3	-2	-2	3
13	-3	-4	-4	-6	-7	-7	-7	-7	-7	-4	-2	-1	1	2	3	3	2	1	2	-1	-2	-1	-1	-1	-2	3
14	-4	-4	-4	-6	-6	-6	-6	-7	-6	(MT)	(MT)	(MT)	(MT)	(MT)	7	6	5	2	2	0	-1	-2	-2	-3	-2	7
15	-2	-2	-6	-7	-7	-8	-7	-8	-8	-1	-1	0	2	3	4	4	4	2	2	-1	-2	-2	-3	-4	0	4
16	-5	-1	-1	-2	-2	-2	-1	-2	-2	4	6	-4	-1	-1	1	1	1	1	0	-1	-1	-2	-3	-4	-3	1
17	-1	0	-1	-2	-2	-3	-3	-3	-4	2	4	6	6	6	6	6	6	4	1	1	1	1	-1	-1	-2	6
18	-1	-1	-1	-2	-3	-3	-3	-3	-4	-3	1	3	4	5	5	5	4	2	2	2	1	0	-1	-2	0	5
19	-3	-3	-3	-3	-3	-4	-4	-4	-2	-2	0	1	2	3	4	4	3	2	1	0	-1	-2	-3	-3	-1	4
20	-3	-3	-4	-4	-4	-3	-3	-2	-2	-1	1	2	3	4	4	4	4	3	2	0	-1	-1	-2	-2	0	4
21	-3	-2	-2	-4	-3	-4	-4	-4	-4	-2	1	2	4	5	5	6	5	3	3	2	0	-1	-2	-2	0	6
22	-2	-2	-2	-3	-3	-4	-5	-4	-3	-1	2	4	6	7	8	8	8	6	4	3	3	3	2	0	2	8
23	0	1	1	1	1	1	1	1	1	4	3	3	3	3	3	3	0	-1	-2	-3	-3	-4	-4	4	1	10
24	3	3	3	2	2	2	1	1	2	5	8	9	9	10	9	8	7	6	4	3	3	3	4	4	4	4
25	-4	-4	-5	-6	-6	-6	-7	-7	-7	-5	-4	-3	-2	-2	-1	-1	-1	-1	-2	-3	-6	-7	-7	-8	-5	-1
26	-8	-8	-9	-9	-11	-10	-9	-11	-10	-7	-6	-4	-3	-2	-2	-2	-2	-2	-4	-5	-4	-4	-4	-4	-6	-2
27	-4	-4	-4	-4	-4	-5	-4	-4	-3	-2	-1	1	1	1	2	1	1	1	0	-1	1	1	1	1	1	2
28	1	1	1	1	0	1	1	1	1	2	3	4	3	4	3	3	2	1	1	1	1	1	1	0	1	4
29	-1	-2	-2	-2	-2	-2	-3	-3	-2	-1	0	4	-5	1	1	1	1	0	-1	-1	-1	-1	0	1	-1	4
30	0	0	0	0	-1	-1	1	1	2	1	1	0	-1	-3	-3	-4	-4	-4	-5	-6	-6	-6	-6	-7	-2	2
31	-7	-7	-8	-9	-9	-9	-9	-9	-9	-8	-8	-7	-7	-7	-6	-7	-7	-7	-8	-8	-8	-8	-8	-8	-8	-6
AV	-2	-2	-2	-3	-3	-3	-3	-4	-3	-2	0	1	2	3	3	3	3	1	0	0	-1	-1	-1	-2	-1	
PK	4	3	3	3	3	3	3	2	3	6	8	9	9	10	9	11	9	7	5	4	4	3	4	4	4	11
MN	-8	-8	-9	-9	-11	-10	-9	-11	-10	-8	-8	-7	-7	-7	-6	-7	-7	-7	-8	-8	-8	-8	-8	-8	-8	

MONTHLY MINIMUM = -11

TEMPERATURE # 30M  
DEGREE C

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	2	2	1	1	1	1	1	0	-1	0	2	4	7	8	9	10	9	8	5	4	5	4	4	4	4	10
2	4	4	4	4	3	2	4	3	1	6	6	7	8	8	7	8	7	6	4	4	3	3	3	3	4	8
3	4	2	2	3	2	2	3	2	2	3	6	7	7	7	8	8	6	5	5	3	3	3	3	2	4	7
4	2	2	2	2	2	3	3	2	2	4	4	5	5	8	8	8	7	4	4	3	2	1	1	1	4	8
5	-1	-1	-1	-2	-2	-3	-3	-3	-4	-4	-4	-5	-5	-4	-4	-4	-3	-3	-3	-3	-3	-3	-3	-3	-3	-1
6	-3	-4	-4	-4	-4	-6	-8	-8	-7	-7	-6	-4	-2	-2	-1	-1	-1	-2	-2	-2	-2	-4	-4	-3	-4	-1
7	-2	-3	-3	-3	-4	-5	-5	-5	-3	-1	-1	-1	1	1	3	3	3	2	2	1	1	1	0	-1	-1	-1
8	-3	-3	-3	-4	-3	-3	-3	-3	-6	-6	-3	-1	3	4	4	6	4	3	2	2	2	1	0	-1	-1	6
9	-1	0	0	-1	-5	-6	-4	-3	-3	-3	0	2	3	4	4	4	4	3	2	1	1	0	0	-1	0	4
10	-1	-1	-2	-2	-3	-3	-3	-3	-3	-2	0	2	3	4	6	5	4	3	2	1	1	-1	-1	-1	0	6
11	-2	-3	-3	-4	-4	-4	-4	-5	-4	-3	-1	1	2	3	4	4	3	2	1	0	-1	-1	-2	-2	-1	4
12	-2	-2	-4	-6	-6	-6	-6	-4	-4	-4	-3	0	2	3	3	3	3	2	1	-1	-1	-2	-2	-1	-1	3
13	-1	-2	-3	-6	-6	-6	-6	-6	-6	-4	-2	-1	1	2	3	3	2	1	1	-1	-2	-2	-2	-2	-2	3
14	-3	-3	-3	-4	-4	-5	-4	-6	-6	(MT)	(MT)	(MT)	(MT)	(MT)	6	6	5	3	2	0	-1	-1	-1	-1	-1	6
15	-1	-1	-1	1	0	-1	0	-1	-1	-1	-1	-1	1	3	3	4	3	2	0	-1	-1	1	-1	-1	-1	4
16	-5	-6	-6	-6	-7	-7	-7	-8	-8	-7	-6	-4	-1	-1	1	1	1	1	1	0	-1	-2	-2	-4	0	4
17	-1	1	1	-1	-1	0	-1	-1	1	2	4	6	6	6	6	6	6	6	3	3	2	2	1	1	-3	1
18	0	1	-1	-1	-1	-3	-2	-3	-3	-3	-1	3	4	5	5	5	5	4	3	3	2	1	0	0	2	6
19	-1	-2	-2	-3	-3	-3	-4	-3	-3	-2	-1	1	2	3	3	4	3	3	2	2	1	-1	-2	-2	1	5
20	-2	-2	-3	-3	-3	-2	-2	-2	-2	-1	1	2	3	4	4	4	4	4	3	3	1	0	-1	-2	0	4
21	-2	-2	-2	-2	-3	-3	-3	-3	-3	-2	1	2	3	4	5	5	4	4	3	3	1	1	-1	-2	0	4
22	-1	-1	-1	-2	-1	-3	-4	-3	-2	-1	2	4	6	7	8	8	8	7	6	4	3	4	4	2	2	8
23	2	2	2	1	2	2	2	1	2	4	8	8	9	9	9	8	8	6	4	4	4	4	5	5	5	9
24	4	4	3	3	3	3	2	2	2	3	3	2	3	3	2	0	-1	-1	-2	-2	-3	-4	-4	-4	1	4
25	-4	-4	-4	-5	-5	-5	-6	-7	-7	-6	-4	-3	-3	-2	-1	-1	-2	-2	-3	-4	-5	-6	-6	-7	-4	-1
26	-8	-8	-9	-8	-9	-9	-8	-10	-10	-7	-4	-5	-3	-2	-2	-1	-2	-3	-4	-4	-4	-4	-4	-4	-6	-2
27	-4	-4	-4	-4	-4	-4	-4	-4	-3	-2	-1	0	1	1	1	1	1	1	0	-1	1	1	1	1	-2	1
28	1	1	0	1	0	1	1	1	1	2	2	3	3	3	3	2	2	1	1	1	1	1	1	1	1	3
29	-1	-2	-2	-2	-2	-2	-2	-3	-2	-1	-1	3	-6	0	1	1	1	0	-1	-1	-1	-1	0	1	-1	3
30	0	0	0	0	0	-1	1	1	2	1	1	0	-1	-3	-4	-4	-4	-4	-5	-5	-6	-6	-6	-7	-2	2
31	-7	-7	-8	-8	-8	-8	-9	-9	-9	-8	-8	-7	-7	-7	-7	-7	-7	-8	-8	-8	-8	-8	-8	-8	-8	-7
AV	-1	-1	-2	-2	-2	-3	-3	-3	-3	-2	0	1	2	3	3	3	3	2	1	0	0	-1	-1	-1	0	
PK	4	4	4	4	3	4	4	3	4	6	8	8	9	9	9	10	9	8	6	4	5	4	5	5		10
MN	-8	-8	-9	-8	-9	-9	-9	-10	-10	-8	-8	-7	-7	-7	-7	-7	-7	-8	-8	-8	-8	-8	-8	-8	-8	

MONTHLY MINIMUM = -10

CB-TRACY  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK	
1	2	2	2	1	1	1	1	1	1	1	2	4	7	8	9	10	9	8	6	5	5	5	5	6	4	10	
2	6	4	4	4	2	4	4	4	4	6	5	7	7	8	7	7	7	6	5	4	3	4	4	4	5	8	
3	4	2	4	3	3	3	3	3	3	3	6	6	7	7	8	8	6	6	5	4	3	3	3	3	4	7	
4	2	-1	-1	-2	-2	-3	-3	-4	-4	-5	-5	-5	-5	-4	-4	-4	-4	-3	-2	-3	-3	-3	-3	-3	4	4	
5	-1	-4	-4	-4	-5	-6	-7	-8	-6	-5	-4	-3	-2	-2	-1	-1	-1	-2	-2	-2	-2	-3	-3	-3	-4	4	
6	-2	-2	-2	-3	-3	-3	-3	-4	-2	-1	-2	-3	-2	3	4	4	4	3	2	2	2	0	-1	-1	0	3	
7	-2	-3	-3	-3	-2	-2	-2	-3	-6	-5	-2	-3	-2	4	4	4	4	3	2	2	1	1	0	-1	0	6	
8	-3	-1	-1	1	-3	-5	-4	-4	-2	-2	-2	0	3	4	4	4	4	3	2	2	1	1	1	-1	1	4	
9	-1	1	1	1	-2	-2	-2	-2	-2	-2	0	2	3	4	4	4	4	3	2	2	1	-1	-1	-1	1	6	
10	-2	-2	-3	-3	-3	-4	-4	-4	-4	-3	-1	1	2	2	2	5	4	3	3	3	0	-1	-1	-2	-1	3	
11	-2	-1	-4	-5	-5	-6	-5	-4	-4	-3	-2	-1	1	2	3	3	3	2	1	0	0	1	0	0	-1	6	
12	0	-3	-2	-4	-6	-4	-4	-4	-4	-3	-2	-1	1	2	2	6	5	4	3	2	1	-2	-2	-4	0	3	
13	-3	-3	-3	-3	-4	-4	-4	-3	-5	-3	(MT)	(MT)	(MT)	(MT)	(MT)	6	5	4	3	2	1	1	0	0	-1	6	
14	-3	-3	-3	-3	-4	-4	-4	-3	-5	-3	-1	-1	1	3	3	3	3	2	0	-1	-1	-2	-2	-4	0	3	
15	-1	0	1	1	-7	-1	0	-1	-1	0	-1	-1	1	-1	0	1	1	1	0	-1	-1	-2	0	1	-3	1	
16	-5	-5	-6	-6	-7	-7	-7	-8	-8	-6	-6	-4	-2	-1	0	1	1	1	0	-1	-1	-2	0	1	-3	1	
17	-1	1	1	0	0	1	1	1	1	1	3	4	4	5	5	4	4	3	2	2	2	1	0	0	1	5	
18	-1	1	1	0	0	1	1	1	1	1	5	6	7	7	8	8	7	6	4	4	4	4	5	5	1	4	
19	-2	-2	-2	-2	-2	-2	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-2	-2	-2	1	-1	-1	-2	0	4	
20	-2	-2	-2	-2	-3	-2	-2	-2	-2	-2	-1	1	2	2	2	5	4	3	3	3	3	1	-1	-1	0	4	
21	-2	-2	-2	-2	-3	-2	-3	-3	-2	-2	1	2	3	4	4	4	4	3	2	2	2	4	5	3	1	8	
22	-1	-1	1	2	2	3	3	2	3	3	2	4	8	9	9	8	7	6	4	4	4	4	5	3	3	9	
23	2	4	4	3	3	3	2	2	2	3	2	-4	-3	-3	-2	-2	-1	-2	-2	-2	-3	-4	-4	-4	1	4	
24	4	4	4	3	3	3	2	2	2	2	-6	-5	-3	-3	-2	-2	-2	-3	-4	-4	-4	-5	-5	-6	1	4	
25	-7	-7	-7	-4	-9	-9	-9	-9	-9	-7	-4	-4	-4	-3	-2	-2	-2	-3	-4	-4	-4	-4	-4	-4	-4	1	4
26	-4	-4	-4	-4	-4	-4	-4	-4	-3	-2	-1	0	3	3	3	1	1	0	1	1	1	1	1	1	-2	1	3
27	-4	0	0	0	0	0	1	1	1	2	2	3	3	3	3	3	2	1	1	1	1	0	0	-1	1	3	
28	1	0	-2	-2	-2	-2	-1	-1	-2	-1	-1	0	-6	0	0	1	0	-1	-1	-1	-1	-1	-1	-1	-1	3	
29	-1	0	0	1	0	-1	1	1	1	1	1	0	-2	-3	-4	-4	-4	-4	-5	-5	-6	-6	-6	-7	-2	3	
30	0	0	0	-1	-2	-2	-1	-1	-1	-1	-1	0	-7	-7	-7	-7	-7	-7	-8	-8	-8	-8	-8	-8	-8	3	
31	-7	-7	-8	-8	-8	-8	-9	-9	-9	-8	-8	-7	-7	-7	-7	-7	-7	-8	-8	-8	-8	-8	-8	-8	-8	-7	

MONTHLY MINIMUM = -9

C-B TRACT  
MRI AD42  
JAN 1981

TEMPERATURE @10M

DATA NOT AVAILABLE AT REPORT TIME



TEMPERATURE @10M

C-B TRACT  
MRI AD56  
JAN 1981

DATA NOT AVAILABLE AT REPORT TIME

DELTA TEMPERATURE 60-10M  
DEGREE C\*100

CB-TRACI  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	17	56	78	83	78	89	100	167	156	67	-44	-78	-83	-72	-67	-72	-17	117	94	11	44	183	122	250	53
2	206	117	117	39	78	61	83	100	50	-50	-83	-89	-89	-83	-83	-72	-56	-11	17	0	61	106	17	-11	18
3	-28	11	78	83	50	67	61	78	50	11	-33	-89	-100	-89	-83	-83	-50	56	78	72	44	17	-11	67	11
4	50	89	122	161	44	17	39	56	50	-61	-44	-78	-83	-106	-94	-89	-67	-39	-50	-56	-61	-28	-39	-22	-12
5	-28	-22	-61	-67	-50	0	-44	-61	-67	-72	-72	-78	-83	-94	-106	-106	-72	-61	-61	-56	-50	-22	-39	-33	-59
6	-50	-44	-33	-33	0	83	28	56	194	178	28	-44	-61	-61	-67	-72	-56	-17	6	6	161	100	83	161	23
7	139	178	144	150	200	261	200	183	189	167	67	111	44	-39	-56	-67	-33	67	50	-11	67	172	167	156	104
8	111	33	106	161	122	172	222	217	200	61	-6	-67	-50	-33	-72	-44	-22	56	22	44	122	161	122	117	73
9	106	89	178	178	317	106	144	83	161	117	-56	-72	-72	-72	-67	-72	-50	11	22	39	67	72	83	106	59
10	150	183	100	150	144	128	122	72	56	-6	-39	-67	-72	-72	-78	-61	-44	39	33	39	44	72	50	100	44
11	106	128	67	156	83	72	83	144	94	128	-33	-83	-78	-72	-72	-72	-39	33	44	17	50	67	89	189	46
12	150	106	244	72	106	44	89	100	128	100	61	-50	-83	-72	-67	-72	-39	0	28	33	61	122	106	106	53
13	256	156	217	228	94	111	172	156	178	-6	-72	-83	-89	-72	-78	-72	-44	-6	39	44	39	44	0	67	53
14	89	89	94	183	144	117	111	261	78	(MT)	(MT)	(MT)	(MT)	(MT)	-83	-78	-56	17	-22	78	100	61	33	67	68
15	156	178	150	67	22	39	17	44	17	-6	-67	-78	-72	-72	-67	-67	-67	11	0	6	11	28	83	-6	14
16	-22	44	22	33	17	11	-22	-22	-22	-89	-78	-100	-100	-89	-100	-83	-78	-28	-11	-44	-17	56	-33	6	-31
17	56	67	28	28	50	78	83	72	78	-72	-78	-72	-78	-78	-78	-78	-61	-17	50	72	83	78	44	67	13
18	50	89	111	128	144	150	100	22	56	28	-61	-78	-83	-94	-94	-83	-50	-39	-28	-17	-11	-6	28	39	13
19	56	28	22	28	44	-11	11	128	72	-11	-67	-78	-72	-78	-83	-78	-67	-28	-6	28	78	100	128	78	9
20	78	39	128	100	106	28	-6	22	50	-28	-100	-94	-94	-78	-67	-78	-50	-22	-17	28	11	-22	33	56	1
21	50	17	44	150	22	100	100	78	106	-33	-72	-83	-72	-83	-89	-72	-56	33	0	22	139	139	228	117	33
22	22	111	217	228	256	233	167	67	44	11	-50	-72	-78	-78	-78	-67	-56	33	17	67	61	106	228	267	69
23	200	133	83	133	139	133	167	194	189	-33	-67	-83	-78	-72	-83	-67	-50	-33	39	100	100	83	39	0	49
24	11	-22	28	56	106	89	67	83	0	-89	-117	-111	-117	-111	-106	-83	-72	-56	-56	-33	-28	-72	-78	-50	-32
25	-11	-17	6	44	22	11	22	-6	-50	-94	-100	-100	-94	-89	-94	-89	-67	-44	-28	117	39	106	133	133	-10
26	50	28	33	72	111	44	-17	122	22	-89	-94	-83	-106	-94	-89	-89	-83	-72	-61	-56	-56	-44	-39	-22	-25
27	-56	-44	-39	-33	-28	-6	-22	-17	-44	-83	-89	-94	-94	-89	-89	-83	-72	-61	-56	-33	-44	-61	-61	-57	-6
28	-67	-56	-61	-56	-50	-56	-39	-50	-67	-83	-83	-100	-89	-89	-106	-89	-72	-11	-11	-50	-56	-61	-56	-61	-63
29	-67	-67	-39	-28	-50	-44	-11	-56	-44	-56	-94	-100	-128	-94	-89	-89	-78	-61	-56	-28	-56	-56	-56	-39	-62
30	-22	-11	-39	6	28	17	-44	-44	-56	-67	-72	-72	-78	-83	-83	-83	-72	-50	-44	-22	-28	-22	-44	-67	-44
31	-67	-28	6	94	122	72	-11	-39	-61	-78	-89	-78	-83	-78	-72	-67	-78	-72	-61	-50	-33	-22	-44	-61	-37
AV	54	53	69	84	80	72	64	71	58	-8	-57	-75	-80	-80	-82	-77	-57	-8	-1	12	30	47	42	55	12
PK	256	183	244	228	317	261	222	261	200	178	67	111	44	-33	-56	-44	-17	117	94	117	161	183	228	267	317
MM	-67	-67	-61	-67	-50	-56	-44	-61	-67	-94	-117	-111	-128	-111	-106	-106	-83	-72	-61	-56	-61	-72	-78	-67	

MONTHLY MINIMUM = -128

RELATIVE HUMIDITY @ 3M  
PERCENT

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	81	82	85	88	88	90	90	92	92	91	75	59	49	40	35	32	31	27	35	48	55	57	59	62	64	92
2	63	64	60	60	61	60	61	60	60	59	47	41	39	35	34	36	40	39	40	48	50	54	60	65	52	65
3	74	79	79	81	85	87	91	92	91	91	79	62	50	43	41	41	42	44	50	62	69	73	73	74	69	92
4	76	80	82	85	87	87	85	84	75	75	70	54	43	41	40	38	36	37	41	48	59	71	92	94	66	94
5	94	94	94	94	94	94	94	94	94	94	93	93	93	93	93	92	90	89	89	89	89	89	89	90	92	94
6	90	90	91	91	91	91	91	91	91	91	90	80	69	64	58	59	59	51	60	82	90	92	92	93	81	93
7	93	93	90	86	86	85	86	88	88	88	80	70	46	44	65	82	85	85	85	86	85	86	87	88	82	93
8	88	88	89	89	85	85	80	65	59	45	33	28	25	21	28	51	66	67	70	76	77	81	84	77	65	89
9	78	75	90	91	93	89	72	55	(MT)	(MT)	41	39	37	35	34	31	32	37	55	60	63	64	64	66	59	93
10	66	67	70	70	71	71	72	72	72	71	59	50	37	33	33	34	36	42	60	65	70	73	75	77	60	77
11	80	83	84	86	90	91	92	93	93	83	62	51	43	37	34	31	31	45	62	70	72	76	80	84	69	93
12	84	85	85	87	88	89	90	90	90	74	61	56	45	35	36	37	38	40	50	62	69	70	77	78	67	90
13	78	80	78	83	84	84	88	89	90	74	52	46	43	36	35	34	37	44	53	59	64	64	66	68	64	90
14	69	72	75	76	79	80	84	83	83	70	55	47	38	32	26	27	27	28	34	40	50	56	56	56	56	84
15	58	61	63	61	57	56	57	58	64	65	73	94	90	65	45	40	39	39	50	61	67	70	74	76	62	94
16	77	76	79	83	86	88	92	(MT)	(MT)	97	79	69	61	60	55	52	55	58	64	70	76	77	88	91	74	97
17	94	94	94	94	94	95	96	96	94	85	70	60	54	52	51	53	54	54	65	81	84	89	93	95	79	96
18	96	98	98	97	95	96	96	97	98	92	85	65	48	40	37	37	38	46	54	63	73	75	78	85	74	98
19	87	90	92	93	94	95	98	98	98	95	66	45	34	32	29	30	30	31	42	59	64	65	69	73	67	98
20	75	75	75	78	80	81	80	79	78	79	57	51	50	47	44	42	39	39	39	44	53	58	60	61	61	81
21	64	66	69	67	71	75	77	79	77	67	50	35	31	31	31	32	32	35	45	57	65	70	72	77	57	79
22	81	81	82	85	88	89	90	91	93	76	56	46	36	28	24	22	21	22	29	41	48	52	55	57	58	93
23	60	62	60	60	58	59	57	56	56	53	(MT)	27	22	21	21	21	22	24	25	30	35	41	45	46	42	62
24	45	41	41	41	42	44	45	46	48	50	47	42	46	51	48	42	41	62	75	73	79	94	95	99	56	99
25	99	99	97	90	89	88	83	83	80	81	81	55	49	45	38	35	31	31	34	43	51	62	66	71	66	99
26	73	75	80	80	81	83	85	88	87	86	86	66	48	47	42	37	37	37	38	40	43	46	46	47	62	88
27	47	45	46	47	48	48	49	51	53	54	52	47	45	43	41	41	39	41	40	40	41	44	43	38	45	54
28	38	38	38	38	40	41	43	45	48	50	51	47	44	44	47	51	53	55	57	61	67	67	70	72	50	72
29	72	71	72	90	96	96	98	98	98	98	98	80	70	64	61	55	53	53	54	59	65	67	64	63	75	98
30	60	56	56	56	54	54	54	54	47	42	41	41	76	90	92	85	80	70	69	70	75	78	83	86	65	92
31	96	96	96	95	94	93	95	97	98	98	96	92	87	84	90	87	92	94	94	94	96	97	97	98	94	98

AV	75	76	77	78	79	79	80	79	79	76	66	56	50	46	45	45	45	47	53	61	66	70	73	74	66	
PK	99	99	98	97	96	96	98	98	98	98	98	94	93	93	93	92	92	94	94	94	96	97	97	99		99
MN	38	38	38	38	40	41	43	45	47	42	33	27	22	21	21	21	21	22	25	30	35	41	43	38		

MONTHLY MINIMUM = 21

SOLAR RADIATION  
LANGLEY

CB-TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL	PEAK
1	0	0	0	0	0	0	0	0	7	14	20	23	24	22	16	9	0	0	0	0	0	0	0	0	135	24
2	0	0	0	0	0	0	0	0	7	11	12	19	24	21	8	9	3	0	0	0	0	0	0	0	114	24
3	0	0	0	0	0	0	0	0	5	13	19	19	23	20	14	9	2	0	0	0	0	0	0	0	123	23
4	0	0	0	0	0	0	0	0	5	14	12	12	14	23	19	9	1	0	0	0	0	0	0	0	109	23
5	0	0	0	0	0	0	0	0	0	5	4	5	8	11	5	3	1	0	0	0	0	0	0	0	41	11
6	0	0	0	0	0	0	0	1	5	9	11	17	25	27	20	11	2	0	0	0	0	0	0	0	129	27
7	0	0	0	0	0	0	0	1	13	23	28	26	26	23	18	10	2	0	0	0	0	0	0	0	170	28
8	0	0	0	0	0	0	0	1	12	23	30	31	26	23	18	10	2	0	0	0	0	0	0	0	177	31
9	0	0	0	0	0	0	0	1	7	15	21	24	25	23	18	11	2	0	0	0	0	0	0	0	147	25
10	0	0	0	0	0	0	0	0	4	11	17	23	26	22	22	9	3	0	0	0	0	0	0	0	137	26
11	0	0	0	0	0	0	0	1	9	17	22	25	25	24	19	11	2	0	0	0	0	0	0	0	156	25
12	0	0	0	0	0	0	0	1	9	14	19	28	30	20	15	12	3	0	0	0	0	0	0	0	150	30
13	0	0	0	0	0	0	0	1	8	16	22	26	27	24	19	11	3	0	0	0	0	0	0	0	157	27
14	0	0	0	0	0	0	0	0	7	15	21	26	27	24	20	12	3	0	0	0	0	0	0	0	155	27
15	0	0	0	0	0	0	0	0	2	5	4	16	22	23	19	11	3	0	0	0	0	0	0	0	106	23
16	0	0	0	0	0	0	0	1	8	23	36	32	30	26	24	11	5	0	0	0	0	0	0	0	196	36
17	0	0	0	0	0	0	0	1	8	13	24	25	20	16	11	5	3	0	0	0	0	0	0	0	126	25
18	0	0	0	0	0	0	0	2	20	20	42	43	43	40	32	18	2	0	0	0	0	0	0	0	262	43
19	0	0	0	0	0	0	0	3	21	40	29	29	27	24	19	11	2	0	0	0	0	0	0	0	206	40
20	0	0	0	0	0	0	0	1	6	17	24	27	28	25	20	11	3	0	0	0	0	0	0	0	161	28
21	0	0	0	0	0	0	0	1	9	17	23	27	28	25	20	11	3	0	0	0	0	0	0	0	164	28
22	0	0	0	0	0	0	0	2	10	17	23	27	28	25	20	12	3	0	0	0	0	0	0	0	167	28
23	0	0	0	0	0	0	0	2	9	17	24	28	28	26	17	8	3	0	0	0	0	0	0	0	162	28
24	0	0	0	0	0	0	0	2	10	19	20	24	29	26	22	12	4	0	0	0	0	0	0	0	168	29
25	0	0	0	0	0	0	0	2	12	21	25	28	29	26	21	12	3	0	0	0	0	0	0	0	178	29
26	0	0	0	0	0	0	0	1	8	18	24	26	23	16	9	5	2	0	0	0	0	0	0	0	131	26
27	0	0	0	0	0	0	0	1	4	9	14	14	13	12	9	3	1	0	0	0	0	0	0	0	80	14
28	0	0	0	0	0	0	0	1	7	7	9	25	12	15	23	13	5	0	0	0	0	0	0	0	115	25
29	0	0	0	0	0	0	0	1	2	8	22	25	16	24	19	13	5	0	0	0	0	0	0	0	134	25
30	0	0	0	0	0	0	0	0	2	3	5	5	8	5	7	5	4	0	0	0	0	0	0	0	45	8
31	0	0	0	0	0	0	0	0	1	2	4	5	5	5	5	3	2	0	0	0	0	0	0	0	31	5

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL	PEAK
1	0	0	0	0	0	0	0	0	28	238	455	611	712	717	666	526	297	82	1	0	0	0	0	0	0	4332
2	0	0	0	0	0	0	0	3	21	40	42	43	43	40	32	18	5	0	0	0	0	0	0	0	0	43



BAROMETRIC PRESSURE  
MILLIBARS

CB-TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	789	789	789	789	789	789	789	789	790	790	790	790	789	788	788	788	788	788	788	789	789	789	789	789	789	790
2	789	789	789	788	788	788	788	788	788	788	788	788	787	787	787	787	787	787	787	787	787	787	788	788	788	789
3	788	788	788	788	788	788	788	788	789	789	789	789	789	788	788	788	788	788	788	788	788	788	788	788	788	789
4	788	788	788	788	788	788	788	788	789	789	789	789	789	788	788	788	788	788	788	788	788	788	788	788	788	789
5	785	785	785	785	784	784	784	784	784	784	785	785	785	786	785	785	786	786	786	786	787	788	788	789	789	789
6	789	789	789	789	790	789	790	790	790	791	791	791	790	790	790	789	789	789	789	789	789	789	789	789	789	791
7	788	788	788	788	787	787	787	787	787	787	787	786	785	785	785	784	784	784	784	784	784	784	784	784	784	788
8	784	784	784	784	784	784	783	783	784	785	785	785	785	785	784	784	784	785	785	785	786	786	786	786	786	786
9	787	787	787	787	787	787	788	788	789	789	789	789	789	788	788	788	788	789	789	789	789	790	790	790	790	786
10	790	790	790	790	791	791	791	791	791	791	792	791	791	790	790	790	791	791	791	791	791	792	792	792	792	791
11	792	792	792	793	793	793	793	793	794	794	794	794	794	793	793	793	793	792	793	793	793	793	793	793	793	794
12	793	792	792	792	792	792	792	792	792	792	792	792	791	790	790	790	789	789	789	789	789	789	789	789	789	791
13	789	789	789	789	789	789	789	789	789	789	789	789	788	788	787	787	787	788	788	788	788	788	788	788	788	789
14	788	788	788	788	788	788	788	788	789	789	789	789	789	788	787	787	787	786	786	786	787	787	786	786	786	789
15	786	787	787	786	785	785	785	785	786	786	786	786	785	784	783	783	783	783	783	783	784	784	784	785	785	787
16	785	785	785	785	785	786	786	786	787	787	787	787	787	787	787	787	787	787	787	787	787	787	787	787	787	787
17	786	786	786	787	787	787	787	787	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788
18	788	788	788	788	788	788	788	788	789	789	789	789	789	788	787	786	786	786	786	786	786	786	786	786	786	789
19	786	786	786	786	786	786	786	785	785	785	789	789	789	788	787	787	787	786	786	786	786	786	787	787	787	789
20	787	786	787	787	787	787	787	787	787	788	788	789	788	788	788	788	788	788	789	789	789	790	790	791	791	791
21	791	791	791	792	792	792	792	793	793	793	793	793	792	791	791	791	791	792	792	792	792	793	793	793	793	794
22	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	793	792	792	792	792	792	793	793	793	793	794
23	790	790	790	790	790	790	790	789	789	789	788	787	786	786	787	787	787	787	787	787	787	786	786	785	785	790
24	785	784	784	784	784	784	784	783	783	783	783	783	782	782	782	782	781	781	781	781	781	782	782	782	783	785
25	781	781	781	781	781	781	782	782	783	783	783	783	783	782	782	782	782	782	782	782	782	782	782	782	782	783
26	782	782	782	782	782	782	782	782	783	783	783	783	783	782	782	782	782	782	782	782	782	783	783	783	783	783
27	783	783	783	783	783	783	783	784	784	784	784	784	783	783	783	783	783	783	783	783	783	783	783	783	783	784
28	783	783	783	783	783	783	783	783	783	782	782	782	781	779	778	778	778	778	779	779	778	778	778	778	778	783
29	779	778	778	778	779	780	780	781	782	784	785	782	779	785	785	784	784	784	784	784	785	785	785	785	785	785
30	785	784	783	783	783	782	782	781	781	781	781	780	780	779	780	780	779	779	779	780	780	780	779	779	781	785
31	779	778	778	778	778	778	778	778	778	778	778	779	778	778	779	779	780	780	781	781	781	781	782	782	779	782
AV	787	787	787	787	787	787	787	787	787	787	787	787	786	786	786	786	786	786	786	786	786	786	786	787	786	
PK	793	793	793	793	793	793	793	793	794	794	794	794	794	793	793	793	793	792	793	793	793	793	793	793	793	794
MM	779	778	778	778	778	778	778	778	778	778	778	779	778	778	778	778	778	778	779	779	778	778	778	778	778	

MONTHLY MINIMUM = 778



PRECIPITATION  
CM#100

CB-TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL PEAK
1																									
2																									
3																									
4																									
5	10	8	8	8	5	8	3	3	5	3	(TR)	(TR)	5	8											63
6																									10
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20																									
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
29	3	5	8	(TR)	(TR)	(TR)	3																		18
30																									5
31	8							3	5	3	3		3	3	3	5				3	5	3		5	43
TL	10	15	15	8	5	8	5	5	10	5	3	( )	8	10	3	5	( )	( )	( )	( )	3	5	3	5	130
PK	8	10	8	8	5	8	3	3	5	3	3		5	8	3	5				3	5	3		5	10

II-252

II-248

PRECIPITATION  
CM#100

CB-TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								TL PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1																									( )
2																									( )
3																									( )
4																									( )
5		5	18	8	25	10	3	5	8	(TR)	(TR)	(TR)	3												84 25
6									5																5
7																									( )
8																									( )
9																									( )
10																									( )
11																									( )
12																									( )
13																									( )
14																									( )
15																									( )
16																									( )
17																									( )
18																									( )
19																									( )
20																									( )
21																									( )
22																									( )
23																									( )
24																									( )
25																									( )
26																									( )
27																									( )
28																									( )
29	3	10	5	5	3																				( )
30																									25 10
31							5	3	3	3	3	3	5 (TR)	3 (TR)	3 (TR)	3 (TR)	3 (TR)	3 (TR)	3	5	3	3	10	5	15 10
TL	3	15	23	13	28	10	8	8	15	3	3	3	8 ( )	3 ( )	3 ( )	3 ( )	3 ( )	3	3	5	3	3	10	5	168
PK	3	10	18	8	25	10	5	5	8	3	3	3	5	3	3	3	3	3	3	5	3	3	10	5	25

EVAPORATION

C-B TRACT  
TRAILER AB23  
JAN 1981

NOT OPERATIONAL

INVERSION HEIGHT  
METERS

CB-TRACT  
TRAILER AC20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE	PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	360	380	375	300	385	390	395	310	120	(NV)	(NV)	(NV)	(NV)	40	160	250	340	395	395	400	370	400	340	385	325	400
2	320	360	330	385	325	370	400	305	110	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	90	170	230	290	295	270	285	240	305	282	400
3	330	350	340	380	340	360	380	290	105	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	200	380	490	500	460	440	470	490	500	378	500
4	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
5	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	330	240	215	305	400	480	450	310	295	( )	480
6	340	390	430	535	540	460	390	400	400	340	315	290	110	(NV)	(NV)	(NV)	130	215	310	390	380	370	360	355	540	
7	400	400	385	400	395	400	395	425	400	370	305	230	(NV)	(NV)	(NV)	100	205	310	330	390	420	450	400	380	357	450
8	310	400	490	500	470	460	405	370	390	320	280	60	(NV)	(NV)	(NV)	50	205	380	320	370	390	430	370	326	430	
9	320	330	370	330	360	370	390	395	330	380	320	100	(NV)	(NV)	(NV)	(NV)	100	240	350	310	315	380	385	353	500	
10	380	380	380	330	310	315	305	370	395	390	305	205	70	(NV)	(NV)	(NV)	100	205	250	320	380	350	310	320	316	395
11	310	320	320	360	315	310	310	300	350	320	240	100	(NV)	(NV)	(NV)	(NV)	(NV)	115	200	300	390	390	330	370	297	390
12	350	380	380	360	320	350	380	400	330	280	250	220	105	(NV)	(NV)	(NV)	(NV)	150	250	290	300	300	290	300	296	400
13	380	390	380	380	400	400	390	400	390	320	200	50	(NV)	(NV)	(NV)	(NV)	90	230	305	300	305	310	300	305	311	400
14	300	305	300	305	305	295	295	300	270	240	230	50	(NV)	(NV)	(NV)	(NV)	90	260	310	305	300	300	315	320	270	320
15	280	280	270	280	290	300	305	285	270	200	90	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	200	250	250	270	290	300	480	272	480
16	470	420	420	400	440	425	400	395	305	270	205	60	(NV)	(NV)	(NV)	100	205	210	350	410	400	400	405	405	338	470
17	380	380	400	405	450	440	460	450	330	270	100	(NV)	(NV)	(NV)	(NV)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	460
18	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	80	270	380	395	390	385	370	370	( )	395
19	(IM)	350	360	380	350	370	385	385	415	395	240	40	(NV)	(NV)	(NV)	(NV)	(NV)	100	200	280	350	370	350	360	318	415
20	400	400	405	360	350	350	380	390	305	270	100	(NV)	(NV)	(NV)	(NV)	(NV)	70	200	300	330	400	400	390	370	325	405
21	390	400	420	440	405	410	420	420	315	305	190	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	100	240	270	310	330	315	340	334	440
22	400	400	400	400	370	370	340	350	360	300	210	200	60	(NV)	(NV)	(NV)	(NV)	185	260	305	275	250	250	250	297	400
23	240	220	280	300	300	270	230	240	250	180	(NV)	(NV)	(NV)	(NV)	40	300	415	350	500	590	505	410	400	400	321	590
24	440	420	430	405	400	400	350	300	295	250	110	(NV)	(NV)	(NV)	(NV)	(NV)	70	170	260	310	305	320	320	300	308	440
25	340	360	350	350	340	300	300	300	350	290	100	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	200	270	280	200	205	260	282	360
26	260	220	220	220	220	250	270	230	270	270	110	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	90	270	210	250	280	230	240	228	280
27	295	300	300	280	290	300	270	270	290	280	190	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	120	250	260	250	220	205	205	254	300
28	260	230	210	250	390	330	400	390	400	270	300	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	50	290	400	300	300	220	310	294	400
29	230	270	280	260	240	210	300	250	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	100	300	385	350	380	400	410	291	410
30	230	270	270	300	295	270	270	240	100	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	( )	300
31	270	270	270	300	295	270	270	240	100	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	( )	300
AV	336	343	351	354	356	352	352	341	306	300	205	( )	( )	( )	( )	( )	176	215	302	339	346	348	329	346	309	
PK	470	420	490	535	540	460	460	450	415	400	320	290	110	40	160	330	415	490	500	590	505	470	490	500		590

STABILITY CLASS # 50M  
0=STB 1=UNST

CB-TRACT  
TRAILER AC20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								PREV.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
4	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
5	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
19	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
PV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



STABILITY CLASS # 200M  
0=STB 1=UNST

CB-TRACT  
TRAILER AC20  
JAN 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
4	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
5	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	0	0	0	0	0	0	0	0	( )
6	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0
18	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
19	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
20	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1
PV	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0

STABILITY CLASS USING DI/DZ  
DI 60-10M  
WS 10M

CB-TRACT  
TRAILER AA23  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE				
1	(	F	(	F	(	(	(	F	F	(	C	B	B	C	D	D	D	E	F	F	(	(	F	F	F	(	E		
2	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
3	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
4	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
5	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
6	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
7	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
8	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
9	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
10	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
11	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
12	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
13	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
14	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
15	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
16	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
17	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
18	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
19	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
20	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
21	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
22	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
23	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
24	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
25	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
26	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
27	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
28	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
29	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
30	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
31	(	F	F	F	F	E	F	F	E	D	C	B	B	C	C	C	D	E	F	E	E	F	E	E	F	E			
AVE																													

TOTAL OCCURRENCES: A= 3 H= 35 C= 51 D=191 E=277 F=137 HOURS MISSING= 50

## C-B SHALE OIL PROJECT

NITRIC OXIDE (NO)

TRAILER AH20 PERIOD( 1/01/81 TO 1/31/81)

AH20

## TRAILER

CONCENTRATION MAX UG/M**3	N	NNE	NE	ENE	E	ESE	SE	WIND DIRECTION								NNW	NW	NNW CALM	TOTAL
								SSW	S	SSW	SW	WSW	W	WNW	NW				
6T 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
LT 10. :	2	6	6	4	65	218	148	14	18	12	11	3	38	78	26	2	92 : 743		
TOTAL :	2	6	6	4	65	218	148	14	18	12	11	3	38	78	26	2	92 743		
MEAN CONC.	0	0	0	0	1	1	1	0	0	1	1	0	1	1	1	0	1		

0 = NO OBSERVATIONS

(02/18/81-RPI)

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

NITRIC OXIDE (NO)

		TRAILER			AH23			PERIOD( 1/01/81 TO 1/31/81)															
		N			NE			E			ESE			SE			SSE			WIND DIRECTION			
		N			NE			E			ESE			SE			SSE			S SSW SW WSW W			
		4			3			3			3			3			3			4 2 4 7			
		9			4			3			3			3			3			4 2 4 7			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0			0			0 0 0 0			
		0			0			0			0			0									

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

OXIDES OF NITROGEN (NOX)

PERIOD( 1/01/81 TO 1/31/81)

TRAILER AB20

CONCENTRATION MAX UG/M**3	WIND DIRECTION																		TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM		
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10. - 20. :	0	0	0	0	0	4	1	0	0	0	0	0	0	1	1	0	6	13	
LT 10. :	2	6	6	4	65	214	147	14	18	12	11	3	38	77	25	2	86	730	
TOTAL :	2	6	6	4	65	218	148	14	18	12	11	3	38	78	26	2	92	743	
MEAN CONC.	0	0	0	3	3	3	3	0	1	3	3	0	2	3	3	0	2	3	

0 = NO OBSERVATIONS

(02/18/81-RPI)



## C-B SHALE OIL PROJECT

OXIDES OF NITROGEN (NOx)

PERIOD( 1/01/81 TO 1/31/81)

AR23

## TRAILER

CONCENTRATION MAX UG/HRS	N		NE		E		ESE		SSE		WIND DIRECTION				W		NNW		CALM		TOTAL
	20	20	15	31	7	15	18	24	24	24	16	7	24	18	24	11	28	20	22		
.....																					
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30. - 40. :	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
20. - 30. :	1	1	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1	1	2	9	
10. - 20. :	3	0	1	0	0	2	2	2	2	2	4	0	4	6	1	2	4	8	8	47	
LY 10. :	13	10	7	6	16	30	38	46	46	65	81	135	48	36	28	43	23	35	660		
TOTAL :	17	11	8	7	16	32	40	49	49	69	81	140	54	38	30	48	32	45	717		
.....																					
MEAN CONC.	6	5	6	8	1	3	3	3	3	2	2	1	3	5	3	4	4	7	5	3	

0 = NO OBSERVATIONS

(02/1A/81-RPI)

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-R SHALE OIL PROJECT

NITROGEN DIOXIDE (NO2)

		TRAILER		AB20		PERIOD( 1/01/81 TO 1/31/81)													

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

TRAILER AB23

PERIOD( 1/01/81 TO 1/31/81)

CONCENTRATION MAX UG/M**3		WIND DIRECTION																TOTAL			
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL		
		11	16	11	20	1	11	15	20	13	5	18	15	13	5	11	16	18			
.....																					
GT 130. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0		
120. - 130. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0		
110. - 120. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0		
100. - 110. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0		
90. - 100. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0		
80. - 90. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0		
70. - 80. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0		
60. - 70. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0		
50. - 60. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0		
40. - 50. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0		
30. - 40. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0		
20. - 30. :		0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0 :	2		
10. - 20. :		1	1	1	0	0	1	2	2	2	0	1	1	1	0	1	2	3 :	19		
LT 10. :		18	10	7	6	16	31	38	46	67	81	139	53	37	30	48	31	43 :	701		
TOTAL :		19	11	8	7	16	32	40	49	69	81	140	54	38	30	49	33	46	722		
.....																					
MEAN CONC.		2	2	3	4	0	1	2	2	1	0	1	2	1	1	2	3	3	2		

OZONE (03)

C-B SHALE OIL PROJECT

TRAILER AB20 PERIOD( 1/01/81 TO 1/31/81)

CONCENTRATION MAX UG/M**3	WIND DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SESE	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL	
GT 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
240. - 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
220. - 240. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
200. - 220. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
180. - 200. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
160. - 180. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
140. - 160. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
120. - 140. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
100. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
80. - 100. :	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0 :	3
60. - 80. :	0	0	0	0	4	9	12	6	5	2	3	2	4	12	3	0	6 :	68
40. - 60. :	2	3	4	1	10	25	20	6	12	4	6	1	23	24	12	2	14 :	169
20. - 40. :	0	3	1	2	21	90	72	2	1	6	2	0	9	31	4	0	28 :	272
LT 20. :	0	0	0	1	30	92	44	0	0	0	0	0	2	11	7	0	44 :	231
TOTAL :	2	6	6	4	65	218	148	14	18	12	11	3	38	78	26	2	92	743
MEAN CONC.	56	41	54	27	25	26	29	54	56	48	53	63	45	38	39	52	25	32

0 = NO OBSERVATIONS

(02/18/81-RPI)

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

OZONE (03)

		PERIOD( 1/01/81 TO 1/31/81)																	
		TRAILER A823										WIND DIRECTION							
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
CONCENTRATION	MAX	96	107	92	84	94	92	98	96	98	101	113	103	111	98	109	99	107	
UG/M**3		96	107	92	84	94	92	98	96	98	101	113	103	111	98	109	99	107	
GT 260. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:
240. - 260. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:
220. - 240. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:
200. - 220. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:
180. - 200. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:
160. - 180. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:
140. - 160. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:
120. - 140. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:
100. - 120. :		0	2	0	0	0	0	0	0	0	1	3	2	4	0	1	0	1	:
80. - 100. :		8	5	3	1	10	10	13	15	38	43	40	9	10	19	22	16	5	:
60. - 80. :		8	2	3	4	3	13	12	16	23	24	72	25	15	7	16	13	30	:
40. - 60. :		2	1	2	1	3	3	2	6	4	1	6	11	5	3	3	5	7	:
20. - 40. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	:
LT 20. :		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	:
TOTAL :		18	10	8	6	16	26	27	37	65	69	121	47	34	29	42	34	44	633
MEAN CONC.		78	83	70	70	78	75	78	76	79	83	76	69	77	80	79	75	69	77

0 = NO OBSERVATIONS

(02/18/81-RPI)



## C-B SHALE OIL PROJECT

TRAILER AR20 PERIOD( 1/01/81 TO 1/31/81)

0 = NO OBSERVATIONS

II-267



C-8 SHALE OIL PROJECT

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

		TRAILER						PERIOD( 1/01/81 TO 1/31/81)										
		N	NNE	NE	E	ESE	SE	SSE	WIND DIRECTION			WSW	W	WNW	NW	NNW	CALM	TOTAL
	CONCENTRATION MAX UG/M <sup>3</sup>	0	2	5	15	7	5	5	SSW	S	SW	5	0	5	7	0	10	
GT	130.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120.-	130.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110.-	120.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100.-	110.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90.-	100.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80.-	90.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70.-	80.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60.-	70.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50.-	60.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40.-	50.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30.-	40.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20.-	30.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.-	20.	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2
LT	10.	2	6	4	65	217	148	14	18	12	11	3	38	78	26	2	91	741
TOTAL	:	2	6	4	65	218	148	14	18	12	11	3	38	78	26	2	92	743
MEAN CONC.	:	0	0	0	1	3	3	2	2	2	3	0	2	3	3	0	2	3

0 = NO OBSERVATIONS

(02/18/81-RPI)



C-B SHALE OIL PROJECT

HYDROGEN SULFIDE (H<sub>2</sub>S)

TRAILER AB23 PERIOD( 1/01/81 TO 1/31/81)

[illegible]

0 = NO OBSERVATIONS

(02/18/81-RPI)



FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

10 METER LEVEL

STATION AB20 PERIOD( 1/01/81 TO 1/31/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	
1	1	1	1	1	3	3	4	4	3	3	4	4	5	5	3	1	0	
GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. - 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. - 8. :	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3
3. - 5. :	0	0	0	0	1	1	39	4	5	2	1	2	12	8	4	0	0	79
1. - 3. :	2	1	2	1	22	139	82	6	13	7	9	0	23	47	7	1	0	362
LT 1. :	0	5	4	3	42	78	27	4	0	3	1	1	2	22	15	1	0	208
TOTAL :	2	6	6	4	65	218	148	14	18	12	11	3	38	79	26	2	0	652
PERCENT	0.	1.	1.	1.	10.	33.	23.	2.	3.	2.	2.	0.	6.	12.	4.	0.	0.	100.

0 = NO OBSERVATIONS

(02/18/81-RPI)

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

10 METER LEVEL

STATION AA23 PERIOD( 1/01/81 TO 1/31/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR
4	0	2	1	3	3	4	4	4	8	8	7	7	4	2	4	4	1
GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. - 11. :	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
5. - 8. :	0	0	0	0	0	0	0	0	8	8	4	1	0	0	0	0	21
3. - 5. :	1	0	0	1	1	2	18	23	20	23	54	26	16	25	25	17	88
1. - 3. :	7	0	2	2	5	16	20	26	26	28	64	26	19	5	12	13	280
LT 1. :	12	11	6	5	10	15	20	26	26	28	64	26	19	5	12	13	303
TOTAL :	20	11	8	7	16	32	40	51	69	81	141	55	38	30	49	40	694
PERCENT	3.	2.	1.	1.	2.	5.	6.	7.	10.	12.	20.	8.	5.	4.	7.	6.	100.

0 = NO OBSERVATIONS

(02/18/81-RPI)

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

30 METER LEVEL

STATION AA23 PERIOD( 1/01/81 TO 1/31/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
2	2	2	3	5	6	12	10	6	6	7	5	3	4	3	5	6	1	
GT 11. :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0 :	1
8. - 11. :	0	0	0	0	0	11	5	0	0	0	0	0	0	0	0	0	0 :	16
5. - 8. :	0	0	0	1	2	25	7	1	1	3	3	0	0	0	2	6	0 :	51
3. - 5. :	0	0	1	1	6	33	15	5	3	9	6	6	3	6	17	9	0 :	120
1. - 3. :	7	4	3	6	13	50	32	22	3	12	8	27	25	23	25	21	1 :	282
LT 1. :	12	11	15	6	22	26	23	14	13	10	15	6	10	10	15	9	5 :	222
TOTAL :	19	15	19	14	43	146	82	42	20	34	32	39	38	39	59	45	6	692
PERCENT	3.	2.	3.	2.	6.	21.	12.	6.	3.	5.	5.	6.	5.	6.	9.	7.	1.	100.

0 = NO OBSERVATIONS

(02/18/81-RPI)

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

60 METER LEVEL

STATION AA23 PERIOD( 1/01/81 TO 1/31/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		VAR
6	6	9	10	8	9	9	5	5	5	5	5	4	3	3	5	5	3	
GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. - 11. :	0	0	1	6	1	2	1	0	0	0	0	0	0	0	0	0	0	11
5. - 8. :	1	2	7	22	9	2	0	1	1	4	5	0	0	0	1	2	0	57
3. - 5. :	2	1	9	15	24	6	4	10	6	11	18	3	5	4	12	11	1	142
1. - 3. :	14	10	13	15	24	21	32	35	33	20	17	10	13	24	22	22	9	334
LT. 1. :	13	8	8	5	6	18	15	13	8	9	3	8	5	6	5	10	14	154
TOTAL :	30	21	38	63	64	49	52	59	48	44	43	21	23	34	40	45	24	698
PERCENT	4.	3.	5.	9.	9.	7.	7.	8.	7.	6.	6.	3.	3.	5.	6.	6.	3.	100.

0 = NO OBSERVATIONS

(02/18/81-RPI)

FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

10 METER LEVEL

STATION AD42 PERIOD (1/1/81 to 1/31/81) -----

DATA NOT AVAILABLE AT REPORT TIME



FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

10 METER LEVEL

STATION AD56 PERIOD (1/1/81 to 1/31/81)

DATA NOT AVAILABLE AT REPORT TIME

FIVE MAXIMUM SLIDING AVERAGE  
UG/M\*\*3

C-B TRACT  
SITE AB20  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR (BEG)	VALUE
S02	3 HR	1	15	12	9.6
		2	14	8	8.7
		3	7	8	7.9
		4	8	8	7.9
		5	9	7	7.9
S02	24 HR	1	14	15	6.2
		2	8	8	5.9
		3	12	10	5.9
		4	7	1	5.7
		5	9	8	5.6
C0	1 HR	1	21	11	0.0
		2	21	12	0.0
		3	21	13	0.0
		4	21	14	0.0
		5	21	15	0.0
C0	8 HR	1	21	8	0.0
		2	21	8	0.0
		3	21	8	0.0
		4	21	8	0.0
		5	21	8	0.0
03	1 HR	1	15	16	100.1
		2	15	15	98.1
		3	15	17	88.3
		4	30	17	78.5
		5	30	15	76.5
PART	24 HR	1	5	1	23.4
		2	23	1	14.0
		3	20	1	9.5
		4	17	1	6.8
		5	11	1	3.7

FIVE MAXIMUM SLIDING AVERAGE  
UG/M\*\*3

C-B TRACT  
SITE AB23  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR (BEG)	VALUE
S02	3 HR	1	22	9	3.5
		2	26	12	3.5
		3	5	16	2.6
		4	5	19	2.6
		5	5	22	2.6
S02	24 HR	1	21	12	2.7
		2	25	15	2.7
		3	7	17	2.6
		4	8	17	2.6
		5	9	17	2.6
C0	1 HR	1	14	16	300.0
		2	14	17	300.0
		3	5	13	200.0
		4	5	14	200.0
		5	14	13	200.0
C0	8 HR	1	14	12	200.0
		2	14	20	100.0
		3	22	18	100.0
		4	23	2	100.0
		5	24	1	100.0
03	1 HR	1	24	14	113.8
		2	24	15	111.8
		3	24	16	109.9
		4	24	17	109.9
		5	15	16	107.9
PART	24 HR	1	20	1	13.6
		2	26	1	9.8
		3	2	1	8.5
		4	8	1	6.1
		5	17	1	5.9

ERROR IN FILE SEARCH NR

FIVE MAXIMUM SLIDING AVERAGE  
UG/M\*\*3

C-B TRACT  
SITE AD56  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME 24 HR	RANK	DAY	HOUR(BEG)	VALUE
PART					
		1	8	1	15.6
		2	14	1	5.6
		3	5	1	5.2
		4	23	1	4.2
		5	26	1	4.0

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

	NO	NO <sub>x</sub>	NO <sub>2</sub>	O <sub>3</sub>	CO	SO <sub>2</sub>
MULTIPOINT RECORDER *	3	3	3	3	3	3
DATA ACQUISITION SYSTEM	96	96	96	96	96	96
OTHER SYSTEMS						
EFFICIENCY	99	99	99	99	99	99

\* Serves as Back-up to Data Acquisition System



SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB20  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

WS	WD	SIGMA HWD 10m	TEMP	INVERS. HT	STB 50m	STB 200m	PART	PRECIP.
----	----	------------------	------	---------------	------------	-------------	------	---------

MULTIPOINT  
RECORDER \*

3	3		3					
---	---	--	---	--	--	--	--	--

DATA ACQUISITION  
SYSTEM

97	97	97	97					
----	----	----	----	--	--	--	--	--

OTHER SYSTEMS

				91	91	91	100	100
--	--	--	--	----	----	----	-----	-----

EFFICIENCY

100	100	97	100	91	91	91	100	100
-----	-----	----	-----	----	----	----	-----	-----

\* Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

	NO	NO <sub>x</sub>	NO <sub>2</sub>	O <sub>3</sub>	SO <sub>2</sub>	H <sub>2</sub> S	CO	BAR PRESS.	SOLAR RAD.
--	----	-----------------	-----------------	----------------	-----------------	------------------	----	---------------	---------------

MULTIPOINT  
RECORDER \*

	10	10	10	10	10	10	10	10	10
--	----	----	----	----	----	----	----	----	----

DATA ACQUISITION  
SYSTEM

	89	87	87	76	89	89	90	90	90
--	----	----	----	----	----	----	----	----	----

OTHER SYSTEMS

EFFICIENCY	99	97	97	86	99	99	100	100	100
------------	----	----	----	----	----	----	-----	-----	-----

\* Serves as Back-up to Data Acquisition System

C-b TRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

SOURCE OF DATA REPORTED  
PERCENT

	TMP 10m	TMP 30m	TMP 60m	DT 60-10m	RH	PART	PREC
MULTIPOINT RECORDER *	10	10	10	17			
DATA ACQUISITION SYSTEM	89	89	89	82			
OTHER SYSTEMS					99	100	100
EFFICIENCY	99	99	99	99	99	100	100

\* Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-bTRACT  
TRAILER AB23  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

SIGMA HWD 10m	SIGMA HWD 30m	SIGMA HWD 60m	WS 10m	WS 30m	WS 60m	WD 10m	WD 30m	WD 60m
------------------	------------------	------------------	-----------	-----------	-----------	-----------	-----------	-----------

MULTIPOINT  
RECORDER \*

16	13	99	16	13	99
----	----	----	----	----	----

DATA ACQUISITION  
SYSTEM

83	86	83	86	83	86
----	----	----	----	----	----

OTHER SYSTEMS

EFFICIENCY

83	86	0	99	99	99	99	99
----	----	---	----	----	----	----	----

\*Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
SITE AD42  
JAN 1981  
OCCIDENTAL OIL SHALE, INC.

WS 10m  
WD 10m  
TMP 10m

OTHER SYSTEMS

EFFICIENCY



SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
SITE AD56

JAN 1981  
OCCIDENTAL OIL SHALE, INC.

WS  
10m

WD  
10m

TMP  
10m

PART

OTHER SYSTEMS

100

EFFICIENCY

100

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AIR MONITORING REPORT  
FOR  
PROTOTYPE OIL SHALE LEASE TRACT C-B

FEBRUARY 1981

SUBMITTED  
APRIL 6, 1981



PREPARED BY :  
OCCIDENTAL OIL SHALE, INC. OPERATOR  
P.O. BOX 2687  
GRAND JUNCTION, COLORADO 81501



## LIST OF TABLES

### SECTION I - AIR QUALITY & METEOROLOGICAL DATA

	<u>Page</u>
DIURNAL VARIATION OF GASEOUS AND PARTICULATE MATTER	
Nitric Oxide (NO) at Station AB20 . . . . .	II-294
Nitric Oxide (NO) at Station AB23 . . . . .	II-295
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB20 . . . . .	II-296
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB23 . . . . .	II-297
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB20 . . . . .	II-298
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB23 . . . . .	II-299
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-300
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-301
Carbon Monoxide (CO) at Station AB20 . . . . .	II-302
Carbon Monoxide (CO) at Station AB23 . . . . .	II-303
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 . . . . .	II-304
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 . . . . .	II-305
Hydrogen Sulfide (H <sub>2</sub> S) at Station AB23 . . . . .	II-306
Particulates Daily Average at Stations AB20, AB23, AD56 . . .	II-307
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS	
Wind Speed at Station AB20 . . . . .	II-308
Wind Speed at Station AA23 - 10 Meter Level . . . . .	II-309
Wind Speed at Station AA23 - 30 Meter Level . . . . .	II-310
Wind Speed at Station AA23 - 60 Meter Level . . . . .	II-311
Wind Speed at Station AD42 . . . . .	II-312
Wind Speed at Station AD56 . . . . .	II-313
Wind Direction at Station AB20 . . . . .	II-314
Wind Direction at Station AA23 - 10 Meter Level . . . . .	II-315
Wind Direction at Station AA23 - 30 Meter Level . . . . .	II-316
Wind Direction at Station AA23 - 60 Meter Level . . . . .	II-317
Wind Direction at Station AD42 . . . . .	II-318
Wind Direction at Station AD56 . . . . .	II-319

LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS (Contd)	
Wind Direction and Vector Average at Station AB20 . . . . .	II-320
Wind Direction and Vector Average at Station AA23 -	
10 Meter Level . . . . .	II-321
Wind Direction and Vector Average at Station AA23 -	
30 Meter Level . . . . .	II-322
Wind Direction and Vector Average at Station AA23 -	
60 Meter Level . . . . .	II-323
Sigma Horizontal Wind Direction at Station AB20 -	
10 Meter Level . . . . .	II-324
Sigma Horizontal Wind Direction at Station AA23 -	
10 Meter Level . . . . .	II-325
Sigma Horizontal Wind Direction at Station AA23 -	
30 Meter Level . . . . .	II-326
Sigma Horizontal Wind Direction at Station AA23 -	
60 Meter Level . . . . .	II-327
Ambient Air Temperature at Station AB20 . . . . .	II-328
Ambient Air Temperature at Station AA23 -	
10 Meter Level . . . . .	II-329
Ambient Air Temperature at Station AA23 -	
30 Meter Level . . . . .	II-330
Ambient Air Temperature at Station AA23 -	
60 Meter Level . . . . .	II-331
Ambient Air Temperature at Station AD42 . . . . .	II-332
Ambient Air Temperature at Station AD56 . . . . .	II-333
Delta Temperature (60m - 10m) at Station AA23 . . . . .	II-334
Relative Humidity at Station AB23 - 3 Meter Level . . . . .	II-335
Solar Radiation at Station AB23 . . . . .	II-336
Barometric Pressure at Station AB23 . . . . .	II-337
Precipitation at Station AB20 . . . . .	II-338
Precipitation at Station AB23 . . . . .	II-339
Evaporation at Station AB23 . . . . .	II-340

# LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS (Contd)	
Inversion Height at Station AC20 . . . . .	II-341
Stability Class at Station AC20 - 50 Meter Level . . . . .	II-342
Stability Class at Station AC20 - 200 Meter Level . . . . .	II-343
Pasquill-Gifford Stability Class using DT/DZ - (60m - 10m) at Station AA23 . . . . .	II-344
MONTHLY SUMMARY REPORT: NO. OF 1 - HOUR SAMPLES OF GASEOUS PARAMETERS BY CONCENTRATION AND BY WIND DIRECTION, 10 METER LEVEL	
Nitric Oxide (NO) at Station AB20 . . . . .	II-345
Nitric Oxide (NO) at Station AB23 . . . . .	II-346
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB20 . . . . .	II-347
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB23 . . . . .	II-348
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB20 . . . . .	II-349
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB23 . . . . .	II-350
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-351
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-352
Carbon Monoxide (CO) at Station AB20 . . . . .	II-353
Carbon Monoxide (CO) at Station AB23 . . . . .	II-354
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 . . . . .	II-355
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 . . . . .	II-356
Hydrogen Sulfide (H <sub>2</sub> S) at Station AB23 . . . . .	II-357
MONTHLY SUMMARY REPORT: FREQUENCY TABLE OF WIND SPEED BY DIRECTION	
Station AB20 . . . . .	II-358
Station AA23 - 10 Meter Level . . . . .	II-359
Station AA23 - 30 Meter Level . . . . .	II-360
Station AA23 - 60 Meter Level . . . . .	II-361
Station AD42 . . . . .	II-362
Station AD56 . . . . .	II-363
MONTHLY SUMMARY REPORT: FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES	
Particulate at Station AB20 . . . . .	II-364
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-364

# LIST OF TABLES SECTION I (Contd)

Page

## MONTHLY SUMMARY REPORT: FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES (Contd)

Carbon Monoxide (CO) at Station AB20 - 1 Hour . . . . .	II-364
Carbon Monoxide (CO) at Station AB20 - 8 Hour . . . . .	II-364
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 - 3 Hour . . . . .	II-364
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 - 24 Hour . . . . .	II-364
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 - 3 Hour . . . . .	II-365
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 - 24 Hour . . . . .	II-365
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-365
Particulate at Station AB23 . . . . .	II-365
Carbon Monoxide (CO) at Station AB23 - 1 Hour . . . . .	II-365
Carbon Monoxide (CO) at Station AB23 - 8 Hour . . . . .	II-365
Particulate at Station AD56 . . . . .	II-366

## MONTHLY SUMMARY REPORT: INSTRUMENT EFFICIENCY

Station AB20 . . . . .	II-367
Station AB23 . . . . .	II-369
Station AD42 . . . . .	II-372
Station AD56 . . . . .	II-373



NITRIC OXIDE  
(UG/M3)

C8-TRACT  
TRAILER AR20  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	2	1	1	1	2	2	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2
19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1
26	2	1	2	2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27	2	1	2	2	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
AV	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
PK	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	2	1	1	2



NITRIC OXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	1	2	2	2	2	2	2	2	2	2	5	4	1	2	2	1	1	1	1	2	2	2	2	2	2	5
2	2	4	4	4	4	4	4	4	2	4	4	4	4	1	0	0	0	0	0	0	0	0	0	1	2	4
3	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	2
4	1	2	2	2	2	1	2	2	2	4	4	10	6	0	0	1	1	1	0	1	0	1	1	1	2	10
5	2	2	2	2	2	1	2	2	1	1	4	4	4	2	0	0	0	0	0	0	0	0	1	1	2	4
6	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	2	0	0	1	1	1	1	2	2
7	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	2	2
8	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	1	0	0	1	1	1	1	2	2	4	2	2	2	0	0	1	0	0	1	1	0	0
11	1	1	1	1	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
12	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
13	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17	0	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	10
PK	2	4	4	4	4	4	4	4	4	5	5	10	6	4	2	2	1	2	1	2	2	2	2	0	1	10

(PF) (PF) (PF)

(MT) (MT)

OXIDES OF NITROGEN  
(UG/M3)

CB-TRACT  
TRAILER AB20  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	2	0	2
2	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	6	4	4	4	4	4	4	4	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
15	8	6	6	6	6	4	4	6	6	9	8	6	4	4	4	6	4	6	6	6	4	4	4	4	4	6
16	6	4	4	4	4	4	4	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
17	4	4	4	4	4	4	4	9	6	8	8	4	4	4	2	4	4	4	4	4	4	4	4	4	4	4
18	6	6	4	4	4	4	4	6	6	8	4	4	4	4	6	4	4	4	4	4	4	4	4	4	4	4
19	4	4	4	4	4	4	4	6	4	4	6	6	4	4	6	4	2	4	6	4	4	4	4	4	4	4
20	4	4	4	4	4	4	4	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21	4	6	4	6	4	6	6	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
22	4	4	4	4	4	4	4	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
23	4	4	4	4	4	4	4	6	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
24	0	0	0	0	0	0	0	0	0	0	0	0	6	4	4	4	4	6	4	4	4	4	6	4	4	2
25	6	4	4	4	4	4	4	6	6	4	6	4	4	4	4	4	4	4	4	4	6	4	4	4	4	6
26	6	4	4	4	4	4	4	4	4	6	4	4	4	4	4	4	4	6	4	4	4	4	4	4	4	6
27	6	6	6	4	4	6	6	9	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	6
28	6	4	4	4	4	4	4	4	6	6	4	4	4	4	4	4	4	4	6	6	6	6	6	4	4	6

AV	2	2	2	2	2	2	2	3	3	3	2	2	2	2	2	2	2	2	3	3	2	2	2	2	2	2	9
PK	8	6	6	6	6	6	6	6	6	9	8	6	6	4	6	6	6	6	6	8	6	6	6	6	6	6	9

OXIDES OF NITROGEN  
(UG/M3)

CB-TRACT  
TRAILER AH23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	8	6	4	4	6	6	6	6	4	6	11	11	4	6	6	4	2	2	4	4	4	4	4	4	5	11
2	6	6	8	15	13	9	8	8	9	8	9	8	8	4	0	0	0	0	0	0	0	2	0	2	5	15
3	2	4	4	4	4	2	4	4	6	4	2	2	2	2	0	0	0	2	0	0	0	0	0	0	5	6
4	4	15	13	15	9	6	8	6	6	9	8	26	19	2	2	6	8	6	2	2	2	4	4	2	7	26
5	4	6	13	15	9	8	15	9	9	8	6	6	6	4	0	0	0	0	0	0	0	0	2	2	5	15
6	4	2	2	2	2	2	2	4	4	0	0	0	0	4	6	4	2	21	2	2	2	4	2	2	3	21
7	4	6	9	8	8	6	6	6	4	4	8	6	6	4	2	2	2	2	0	0	0	2	2	4	4	9
8	4	6	6	4	2	2	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	2	6	2	0	0	2	6	4	4	8	8	6	6	0	2	2	2	2	2	2	2	3	8
11	2	4	2	4	4	4	4	4	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	6
12	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
13	0	0	0	0	0	0	0	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
14	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
15	4	19	0	0	0	0	0	0	9	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	19
16	0	0	0	0	0	0	0	0	0	21	11	0	0	0	0	4	2	2	0	0	0	0	0	0	0	2
17	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	2	2	4	2	2	2	4	4	2	4	2	2	2	0	0	0	4	2	0	2	4	2	1	8
22	2	2	0	4	6	4	2	6	4	2	4	4	2	2	0	0	0	2	0	0	0	0	0	2	2	6
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	(MT)	(MT)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	2	0	1	11
AV	2	3	2	2	3	2	2	2	2	3	3	2	2	1	1	1	1	1	1	1	0	1	1	1	2	26
PK	8	19	13	15	13	9	15	9	9	21	11	26	19	8	6	6	8	21	6	4	11	4	4	4	4	4

NITROGEN DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	2	0	2
2	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	4	2	2	4	2	2	2	2	4	4	6	2	2	2	2	2	2	2	4	4	2	2	2	2	1	2
15	6	4	4	2	2	2	2	4	2	6	2	2	2	2	2	2	2	4	4	4	2	2	2	2	3	4
16	4	2	2	2	2	2	2	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	6
17	2	4	2	2	2	2	2	4	2	4	6	2	4	2	0	2	2	2	2	4	2	2	2	4	2	4
18	2	2	2	2	2	2	2	6	2	4	2	2	0	2	4	2	2	2	2	2	2	2	2	2	2	6
19	2	2	2	2	2	2	2	4	2	2	4	2	2	2	4	2	2	2	4	2	2	2	2	2	2	4
20	2	2	2	2	2	2	2	4	2	2	4	2	2	2	4	2	2	2	2	2	2	2	2	2	2	4
21	2	2	2	2	2	2	2	4	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
22	2	2	2	2	2	2	2	4	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
23	2	2	2	2	2	2	2	4	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
25	4	2	0	2	2	2	2	2	4	2	4	2	2	2	2	2	2	4	2	2	4	2	2	4	2	4
26	2	2	0	0	2	2	0	0	2	4	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	4
27	2	2	2	0	0	2	2	6	4	2	2	2	2	2	2	2	2	4	2	2	4	4	2	2	2	4
28	4	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4
AV	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	6
PK	6	4	4	4	4	4	4	6	4	6	6	4	4	2	4	4	4	4	6	4	4	4	4	4	4	6

NITROGEN DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER A823  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	6	2	0	0	2	2	2	2	0	2	4	6	2	2	2	2	0	0	0	0	0	0	0	0	1	6
2	2	0	2	9	8	4	2	2	2	2	4	2	0	0	0	0	0	0	0	0	0	2	0	0	2	9
3	0	2	2	2	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
4	2	11	11	6	6	4	4	2	4	2	2	11	9	2	2	4	6	4	2	0	2	2	2	0	4	11
5	0	2	9	11	6	4	0	6	4	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	11
6	2	0	0	0	0	4	0	2	2	0	0	0	0	2	4	4	2	17	2	2	0	2	0	0	2	17
7	2	4	6	4	6	4	4	4	2	0	4	2	2	0	0	0	0	0	0	0	0	0	0	2	2	6
8	2	0	4	2	0	2	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	2	4	2	0	0	2	4	2	0	4	2	2	2	0	2	2	0	0	0	0	0	1	4
11	0	2	0	0	0	0	2	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
12	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
13	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
14	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
15	4	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	15
16	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
17	0	0	0	0	0	0	0	0	0	13	8	0	0	0	0	4	2	2	0	0	0	0	0	0	1	13
18	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	6	8	0	6	2	0	0	0	0	4	0	0	2	4	0	1	8
21	2	0	2	2	4	2	2	0	2	2	2	0	0	2	0	0	0	0	0	6	0	0	0	2	1	6
22	2	2	0	4	6	4	2	4	2	2	0	2	0	2	2	0	0	2	0	0	0	0	0	0	1	6
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	2	0	1	11
AV	1	2	1	2	1	1	1	1	1	2	1	1	1	0	0	1	0	0	1	1	0	0	0	0	1	17
PK	6	15	11	11	8	4	11	6	6	13	8	11	9	2	4	4	6	17	6	2	11	2	4	4		



OZONE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	39	37	35	31	37	35	33	35	37	45	61	65	65	71	71	73	73	69	59	57	57	57	57	57	52	73
2	55	55	57	57	57	57	59	57	61	65	69	74	76	78	76	74	74	71	73	69	67	67	65	65	66	78
3	74	76	76	76	76	76	67	49	63	67	74	78	80	90	92	90	86	76	65	59	61	65	67	65	73	92
4	63	61	61	61	61	61	61	49	47	59	73	78	78	78	80	82	84	82	73	61	65	65	65	67	67	84
5	67	67	67	67	69	69	69	65	69	74	76	80	98	98	96	94	90	90	78	73	69	73	73	74	76	98
6	74	73	74	74	76	76	74	73	71	73	76	78	78	80	82	86	86	82	73	71	74	69	71	71	76	86
7	67	67	67	63	71	74	74	74	76	76	78	84	90	98	98	98	96	84	74	67	67	69	69	73	77	98
8	69	69	67	65	65	69	71	71	71	76	80	82	90	98	98	94	84	78	73	69	67	69	71	71	76	98
9	67	71	71	69	74	76	76	69	74	76	78	78	76	78	78	78	76	76	76	76	76	65	71	76	74	80
10	78	78	78	76	74	65	59	63	65	71	74	74	76	76	78	78	76	76	73	74	74	74	74	73	73	78
11	74	73	74	74	74	74	74	74	76	78	78	78	76	78	78	80	76	78	78	78	78	78	78	76	77	80
12	76	76	76	76	78	74	71	67	74	78	78	78	84	84	82	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	84
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	92	92	88	74	67	69	69	67	69	67	( )	92
14	71	71	69	71	73	69	69	71	74	73	82	90	90	94	94	96	96	90	71	71	71	67	71	67	77	96
15	57	51	59	69	65	55	49	39	53	63	80	88	90	94	94	94	84	73	63	53	55	59	57	57	67	94
16	57	59	55	51	51	51	57	59	61	73	88	92	90	92	92	92	90	84	63	61	59	63	65	65	69	92
17	67	61	61	59	59	59	61	59	61	53	57	80	80	108	122	120	123	112	102	90	84	78	74	67	79	123
18	69	69	69	69	74	69	73	73	84	100	123	127	127	125	125	125	122	114	108	98	100	98	94	90	97	127
19	90	88	88	90	88	88	88	90	96	106	118	120	120	120	106	67	69	67	55	49	49	55	63	61	85	120
20	61	55	55	55	47	47	45	55	61	67	69	76	78	67	65	69	67	63	49	55	67	63	53	45	60	78
21	43	37	39	39	39	41	41	43	43	53	61	65	67	67	69	69	67	61	49	47	45	43	43	43	51	69
22	45	45	41	41	41	43	43	39	47	59	71	73	73	69	73	73	73	61	47	47	45	49	47	47	54	73
23	55	51	51	51	51	51	49	51	53	63	71	71	73	74	74	76	74	65	47	51	51	49	53	49	58	76
24	45	49	49	47	47	47	47	49	51	61	67	71	94	90	92	92	90	86	76	73	67	63	65	63	66	94
25	65	67	65	57	61	63	63	59	67	84	88	90	90	92	94	92	88	80	73	67	61	59	55	51	72	94
26	49	55	55	61	59	51	73	73	71	65	69	74	76	76	78	(MT)	82	74	74	86	74	76	80	76	70	86
27	73	69	73	73	67	67	63	61	80	86	86	88	88	88	90	92	94	90	74	74	65	53	53	53	74	94
28	53	55	57	57	57	55	53	63	67	82	96	96	96	92	90	92	92	88	69	65	57	51	49	47	70	96
AV	63	62	63	62	63	62	61	60	65	71	79	83	85	87	88	87	85	79	69	66	65	64	65	63	71	
PK	90	88	88	90	88	88	88	90	96	106	123	127	127	125	125	125	123	114	108	98	100	98	94	90		127

CB-TRACT  
TRAILER AB23  
FER 1981  
OCCIDENTAL OIL SHALE INC.

OZONE  
(UG/M3)

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	73	73	71	71	71	71	74	74	74	73	71	73	76	80	84	88	86	86	80	78	76	78	78	80	77	88
2	78	80	78	71	73	80	82	82	78	80	86	90	90	98	106	106	106	102	102	98	98	98	100	100	90	106
3	100	98	100	98	100	102	102	102	94	98	100	102	104	106	108	106	104	90	92	90	92	94	92	92	99	108
4	88	67	67	76	73	84	82	84	78	82	86	71	82	104	102	102	100	100	102	100	100	102	108	110	90	110
5	108	100	88	86	98	98	84	102	92	98	102	110	114	110	110	108	108	104	104	102	102	102	98	98	101	114
6	98	98	96	94	94	94	96	96	94	94	96	98	102	98	92	96	104	73	96	92	92	94	96	100	95	104
7	98	90	92	96	94	102	96	98	92	88	96	100	102	108	106	102	104	102	98	96	96	96	96	92	98	108
8	92	94	94	92	94	92	94	92	94	96	98	100	102	102	102	104	102	96	94	92	92	90	90	90	95	104
9	92	92	90	90	90	88	88	88	88	88	86	86	88	90	90	88	90	88	88	88	88	88	88	88	89	92
10	88	86	84	76	73	76	73	74	73	71	74	76	78	82	86	86	90	88	82	86	90	88	88	88	82	90
11	92	90	92	92	94	94	96	96	98	100	100	100	100	98	98	98	96	96	94	96	96	94	94	94	96	100
12	92	90	88	88	86	86	84	88	88	90	94	96	98	96	98	94	90	98	96	88	90	88	86	88	91	98
13	92	92	90	90	90	88	88	88	88	90	96	98	100	100	102	106	106	104	92	90	96	86	90	90	95	106
14	90	90	88	88	90	88	88	90	92	90	96	98	100	100	102	106	98	104	100	100	96	86	86	84	83	98
15	78	57	78	78	74	74	69	63	71	80	88	96	98	98	98	98	98	92	86	80	84	86	86	86	90	102
16	88	86	90	82	84	86	80	80	73	80	98	100	100	100	102	98	98	96	94	90	86	86	86	86	86	90
17	88	86	86	86	84	86	84	86	84	57	63	82	86	84	90	82	84	74	73	71	69	65	61	67	78	90
18	63	57	59	65	63	65	71	69	71	92	92	98	100	98	98	98	98	94	92	94	92	88	84	82	87	96
19	88	86	84	80	82	82	84	82	84	88	86	98	92	90	(PF)	90	90	88	90	88	88	86	84	76	84	98
20	80	80	80	80	82	82	84	76	82	80	86	84	84	88	86	88	88	88	80	76	76	76	80	76	84	98
21	74	76	74	67	65	67	67	63	67	73	88	94	96	96	100	98	98	90	80	73	76	76	80	76	77	88
22	84	76	74	71	69	74	71	67	73	78	88	94	96	96	100	98	98	96	88	84	80	80	80	86	83	100
23	86	84	84	84	84	84	82	80	80	90	96	96	96	102	102	102	102	92	92	90	88	96	90	90	95	110
24	82	86	84	86	90	88	88	86	84	(MT)	100	104	104	106	108	108	106	98	90	88	86	80	78	78	93	108
25	88	92	88	86	90	86	88	88	96	100	102	104	88	88	88	82	90	98	100	100	96	96	94	94	87	100
26	76	78	78	80	90	90	86	82	78	71	78	84	88	88	106	110	112	110	96	94	86	84	86	90	95	112
27	94	94	92	92	88	92	90	84	88	92	96	98	102	104	106	110	112	110	96	94	86	84	86	90	87	100
28	74	78	94	90	96	96	88	86	94	104	112	114	112	108	108	108	110	108	100	92	80	92	84	86	96	114
AV	87	84	85	84	84	86	84	84	84	86	91	94	96	98	99	98	99	95	92	90	89	89	88	88	90	
PK	108	100	100	98	100	102	102	102	98	104	112	114	114	110	110	110	112	110	104	102	102	102	108	110		114

CARBON MONOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AR20  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



CARBON MONOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
2	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
4	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
8	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
9	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
11	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
12	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
13	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
14	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
15	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
16	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
PK	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

SULFUR DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AR20  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	10	8	8	10	8	8	8	8	8	8	8	8	8	8	8	8	10	8	8	8	8	8	8	8	4	8
19	8	8	8	8	10	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	5	10
20	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3
21	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	3
22	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	3
23	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	3
24	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	3
25	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
26	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
27	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
28	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

AV	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	2	2	1	10
PK	10	8	8	10	10	8	8	8	8	8	8	8	8	8	8	8	10	8	8	8	8	8	8	8	8	8



SULFUR DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								24	AVE	PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
8	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
9	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
10	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
11	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
12	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
13	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
14	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
15	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
16	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
17	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
18	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
19	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
20	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
21	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
22	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
23	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
24	0	0	0	0	0	0	0	0	0	(MT)	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
AV	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
PK	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		

HYDROGEN SULFIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
FER 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PARTICULATE DATA  
UG/M3

CB-TRACT  
FEB 1981  
OCCIDENTAL OIL SHALE, INC

DAY	STATION		
	AB20	AB23	AD56
1	2.4	3.0	2.0
4	2.8	4.2	2.5
7	8.5	12.4	2.2
10	6.0	8.5	0.9
13	6.8	5.2	2.8
16	6.8	16.7	7.8
19	7.3	5.1	4.5
22	7.1	3.5	4.7
25	15.1	6.0	16.3
28	3.8	10.4	3.8
PK	15.1	16.7	16.3
AV	6.7	7.5	4.7
GM	5.9	6.5	3.5

WIND SPEED @10M  
METERS/SEC

CR-TRACT  
TRAILER AB20  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(CM)	0	(CH)	(CM)	(CM)	(CM)	(CM)	1	0	(CM)	2	4	3	3	2	2	1	1	1	1	1	2	2	3	2	4
2	2	4	2	3	4	4	4	4	5	5	3	2	2	3	2	2	1	1	2	2	3	4	5	5	3	5
3	5	5	5	5	4	4	1	(CM)	(CM)	1	2	2	1	1	1	1	2	1	0	2	1	2	1	2	2	5
4	1	1	1	(CM)	1	2	2	(CM)	(CM)	1	(CM)	1	4	4	4	3	3	1	1	1	1	1	1	2	2	4
5	3	0	1	1	4	4	3	3	3	3	2	5	1	2	3	3	4	2	2	1	0	2	2	2	2	4
6	2	1	2	5	4	2	3	3	4	3	2	2	5	4	5	5	4	1	1	1	1	2	2	3	3	5
7	3	3	2	2	3	4	2	2	2	2	4	4	2	4	4	3	2	2	1	1	1	2	2	2	2	5
8	3	3	3	2	2	2	2	2	2	2	4	4	5	4	3	3	2	2	1	1	1	2	2	2	2	4
9	2	2	2	1	1	1	1	1	2	2	2	2	3	3	3	3	2	2	1	1	1	0	2	4	4	6
10	5	6	5	2	4	4	4	4	5	4	4	3	4	4	3	2	2	1	1	1	1	2	2	4	4	5
11	4	5	4	4	3	2	2	3	3	2	3	3	3	3	3	2	3	3	2	3	4	4	4	4	4	6
12	1	2	2	2	2	2	2	2	3	2	2	1	3	2	3	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	3
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	3	3	2	1	1	1	5	4	4	(	5
14	3	2	4	2	0	1	2	3	2	1	0	1	1	1	2	3	2	1	1	3	4	2	3	1	1	2
15	0	1	1	1	1	1	0	0	2	0	0	1	1	1	0	2	1	(CH)	1	1	1	2	3	1	1	4
16	2	1	0	0	0	1	2	1	2	2	1	2	1	3	4	0	0	1	0	1	1	2	1	0	1	2
17	4	3	2	2	2	4	2	2	2	0	3	2	(CM)	1	4	1	2	1	(CM)	1	2	4	4	4	4	4
18	0	1	2	1	1	(CM)	(CM)	1	3	2	0	1	1	2	2	1	2	2	1	0	1	1	0	1	2	4
19	3	2	2	1	1	2	2	4	5	3	2	3	2	3	3	2	1	1	0	2	1	2	2	2	1	3
20	3	3	3	2	2	1	1	5	5	3	2	3	2	3	3	(CM)	(CM)	(CM)	0	1	1	2	4	5	2	5
21	0	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	0	(CH)	1	2	1	0	2	1	3	2	1	0	0	0	0	1	1	1	1
22	2	2	0	1	2	2	1	0	2	1	0	1	1	1	2	2	1	1	0	0	0	2	2	2	2	2
23	4	2	4	4	4	4	3	4	3	2	2	1	1	2	3	3	2	0	1	2	3	3	5	5	1	1
24	5	4	3	2	2	2	6	7	6	3	4	4	4	4	4	4	3	2	1	1	1	2	2	2	3	3
25	2	2	2	2	3	4	3	2	2	3	4	4	4	4	4	4	4	2	1	1	0	2	2	2	3	7
26	0	3	2	2	1	(CM)	3	4	6	5	4	4	4	3	3	(MT)	(CM)	1	1	2	1	2	2	1	3	4
27	(CM)	0	1	1	(CM)	1	1	1	2	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	2
28	0	1	1	1	2	2	2	3	3	1	2	2	3	2	2	1	1	0	0	(CM)	0	1	1	1	1	3
AV	3	2	2	2	2	2	2	2	3	2	2	2	2	2	3	2	2	1	1	1	1	2	2	2	2	7
PK	5	6	5	5	4	4	6	7	6	5	4	5	5	4	5	5	4	3	2	3	4	5	5	5	5	7

WIND SPEED @ 10M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	2	1	2	1	1	2	3	3	2	2	4	6	4	4	3	2	1	1	1	1	1	0	0	0	2	6
2	1	2	1	0	2	0	0	1	2	1	(CM)	1	1	1	2	4	0	4	4	0	1	1	1	1	1	2
3	1	2	2	2	0	0	0	0	1	1	1	0	1	3	2	1	2	2	2	2	2	0	0	0	1	4
4	1	0	1	0	0	0	0	1	1	0	0	1	1	2	4	1	3	2	1	2	2	1	1	0	1	3
5	0	1	0	0	0	0	1	0	2	1	1	4	1	3	4	4	3	3	2	2	1	1	1	1	1	2
6	1	1	1	1	2	1	1	1	0	0	5	4	4	5	3	5	1	5	1	2	2	0	1	2	1	4
7	1	1	0	4	0	1	4	4	4	4	5	6	7	6	4	5	4	4	4	4	4	4	1	2	1	5
8	1	2	3	4	7	3	4	4	4	4	4	4	4	4	4	6	6	5	6	5	6	4	3	6	4	7
9	7	7	4	2	3	3	4	3	4	4	2	2	3	4	4	2	1	1	1	1	2	2	3	4	3	7
10	2	1	1	1	1	1	2	1	0	0	1	1	2	2	2	4	4	5	3	3	2	1	1	2	1	6
11	2	3	1	1	2	2	2	1	1	5	6	5	4	4	4	2	2	1	3	1	1	2	3	4	3	3
12	2	1	1	1	1	1	2	1	0	1	0	1	2	3	4	4	4	3	3	1	2	2	1	1	1	3
13	0	3	2	1	2	1	2	2	1	1	0	1	4	4	4	4	5	4	2	2	2	(CM)	1	2	2	4
14	2	2	1	2	1	1	1	1	1	1	1	2	0	1	1	0	2	2	3	3	0	1	0	1	2	5
15	2	2	1	2	2	2	1	1	0	0	1	1	1	3	1	0	3	2	2	1	1	2	1	0	1	2
16	0	1	0	1	1	1	1	1	0	0	1	1	0	2	4	5	2	4	2	2	1	1	0	1	1	4
17	1	2	1	1	1	2	1	1	1	1	1	1	3	2	4	0	3	2	2	1	2	2	1	2	2	3
18	1	2	1	1	1	1	2	1	1	1	3	0	2	2	4	2	1	4	4	4	3	0	1	2	1	8
19	1	1	1	0	0	1	1	2	1	2	3	4	4	4	3	2	1	0	0	2	6	3	3	2	4	8
20	8	8	7	6	4	5	4	6	6	5	3	1	0	2	3	0	1	0	1	2	3	(CM)	0	0	4	8
21	1	0	0	0	0	1	1	0	1	1	3	2	1	2	2	2	1	2	0	2	1	1	0	0	1	3
22	0	1	1	2	1	0	0	1	1	1	1	1	1	0	2	3	1	0	0	2	1	2	1	1	2	4
23	1	2	2	2	1	3	3	2	2	1	4	6	6	3	6	7	4	4	4	4	4	5	4	4	4	7
24	2	2	4	4	3	3	3	3	4	5	6	6	5	7	7	6	7	5	6	4	3	4	4	5	5	8
25	4	3	3	2	4	7	8	7	6	5	6	8	7	7	5	5	2	3	3	5	3	4	4	5	5	8
26	5	5	4	2	0	1	4	1	1	1	1	1	1	1	1	0	2	2	2	4	2	2	1	0	2	5
27	1	1	1	0	1	2	2	2	1	1	4	4	4	3	4	3	3	2	2	4	0	0	0	1	2	4
28	1	1	1	0	1	2	2	2	1	1	4	4	4	3	4	3	3	2	3	2	0	0	0	1	2	4
AV	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	8
PK	8	8	7	6	7	7	8	7	6	5	6	8	7	7	7	7	7	5	6	6	6	8	7	8	8	8

(03/26/81-RPI)



WIND SPEED @ 30M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	4	4	3	3	3	4	4	4	4	3	6	9	6	6	3	3	2	2	1	1	2	2	0	0	3	9
2	0	1	1	3	0	1	0	1	1	1	1	1	1	2	3	5	5	5	6	6	2	2	2	1	2	6
3	1	2	3	3	2	3	0	1	1	2	1	0	2	4	3	2	0	3	4	2	0	0	0	0	1	4
4	(CM)	1	2	2	0	(CM)	(CM)	1	1	(CM)	1	1	1	3	2	2	3	3	2	3	2	2	0	(CM)	2	3
5	0	0	0	0	(CM)	0	0	2	0	1	1	1	6	4	6	5	5	4	4	2	2	3	3	1	2	3
6	1	1	2	2	2	1	1	2	2	1	7	3	3	7	5	7	6	6	4	5	3	3	1	2	2	6
7	1	0	0	2	1	1	1	2	0	0	1	3	9	4	5	8	8	2	4	8	8	7	4	1	7	7
8	2	3	4	6	6	5	7	6	5	5	6	6	6	5	8	9	8	8	6	8	9	7	8	1	9	9
9	4	5	7	9	9	7	7	6	5	5	7	3	4	5	7	9	8	2	4	8	3	4	4	9	7	7
10	9	10	2	3	4	4	5	4	5	8	9	3	4	5	4	3	7	7	4	2	3	2	4	2	4	10
11	3	4	2	1	3	2	3	3	2	5	9	7	5	3	3	5	7	2	5	3	3	2	1	6	4	5
12	4	2	2	1	1	2	3	2	1	0	1	2	3	3	3	3	3	4	3	1	2	2	1	1	2	5
13	1	3	2	2	2	2	3	2	2	1	0	2	3	4	5	5	4	3	3	3	3	3	3	1	3	5
14	4	4	2	2	2	1	1	2	2	1	1	3	5	5	6	7	7	7	7	5	0	(CM)	1	4	3	5
15	3	3	1	3	3	2	2	2	1	0	0	1	2	1	1	0	3	3	4	2	1	3	0	(CM)	2	5
16	1	1	0	1	1	0	1	1	1	1	2	2	2	4	5	4	4	4	4	4	1	3	3	2	2	5
17	2	2	2	2	2	4	3	2	2	2	2	2	4	3	3	3	1	3	3	2	2	0	2	2	2	4
18	1	1	2	1	1	2	1	2	1	1	4	0	2	4	4	0	4	6	6	7	6	9	10	4	3	7
19	1	2	2	8	7	8	1	2	2	3	2	4	5	(PF)	(PF)	3	2	2	2	1	9	11	10	10	4	11
20	11	11	10	1	7	8	1	2	8	7	2	4	1	2	4	1	2	2	2	3	4	3	4	3	5	4
21	2	1	1	0	(CM)	1	1	1	1	2	2	4	2	3	3	2	2	1	0	2	2	(CM)	(CM)	0	2	4
22	(CM)	1	0	0	(CM)	0	0	1	1	1	1	1	1	1	3	3	2	1	0	4	1	0	1	1	1	4
23	1	2	3	3	3	2	2	1	2	2	5	3	3	4	4	5	5	8	4	2	3	3	3	3	3	5
24	3	3	3	4	1	3	4	4	3	(MT)	(MT)	8	8	8	8	9	8	6	6	7	6	8	5	4	9	9
25	3	6	6	5	4	5	5	10	6	7	8	10	9	10	9	9	9	7	9	8	5	5	6	6	7	10
26	5	5	5	4	7	9	11	10	8	7	9	10	9	10	7	7	4	4	5	5	7	5	6	6	7	11
27	8	7	6	4	1	2	5	2	1	1	2	1	1	2	2	1	2	3	3	1	3	3	1	0	3	8
28	1	1	1	1	2	2	3	2	2	1	6	5	5	4	4	4	4	3	4	3	0	0	0	0	3	6
AV	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3
PK	11	11	10	9	9	9	11	10	8	8	9	10	9	10	9	9	9	8	9	8	9	11	10	10	10	11

WIND SPEED @ 60M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	4	4	4	4	3	4	5	4	4	3	5	7	5	5	3	3	2	2	1	1	2	1	0	1	3	7
2	2	2	1	1	1	2	2	3	2	1	1	2	1	2	3	4	5	6	7	4	4	3	2	0	3	4
3	0	1	1	3	1	1	1	0	1	2	1	1	1	3	3	2	1	3	3	3	1	1	0	2	2	7
4	0	1	1	1	0	1	1	2	1	1	1	1	1	3	5	5	2	4	4	3	2	4	4	2	2	4
5	0	1	1	1	2	1	0	2	1	2	6	6	6	4	3	2	6	4	4	3	5	5	1	2	2	5
6	1	1	2	1	1	1	2	3	2	5	7	3	3	4	5	6	8	6	3	7	8	7	2	3	3	6
7	2	4	0	7	6	6	7	7	5	5	7	7	8	7	6	8	8	7	7	7	7	6	5	3	6	8
8	4	4	5	8	8	4	4	6	4	4	3	5	4	5	4	3	2	2	4	4	4	4	4	1	6	8
9	8	9	6	3	4	4	4	3	2	7	3	2	4	6	4	6	8	8	8	3	8	8	7	8	4	9
10	3	5	3	1	3	4	4	3	2	4	8	7	5	5	4	3	3	2	2	7	4	2	6	2	5	8
11	5	3	4	1	2	2	4	3	2	2	3	3	4	3	5	6	5	5	4	3	1	2	3	5	3	7
12	7	2	1	1	1	1	1	2	2	1	1	6	3	3	6	8	8	8	2	3	4	4	4	2	3	6
13	5	1	2	1	1	1	1	4	4	7	3	3	4	5	4	4	4	4	5	6	4	7	5	1	4	8
14	5	2	3	3	3	3	4	4	4	4	4	4	4	3	4	3	3	3	4	4	3	3	3	3	3	8
15	5	3	3	3	2	2	2	3	2	2	2	3	3	3	2	2	2	2	3	3	2	2	2	2	2	6
16	3	4	2	2	3	4	5	6	4	4	4	6	6	6	5	6	8	8	6	4	4	4	4	4	4	5
17	2	5	1	2	2	2	2	3	2	2	2	3	3	3	4	4	4	4	4	3	3	3	3	3	3	6
18	1	6	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	8
19	1	7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	10
20	1	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	9
21	2	4	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
22	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	11
23	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
24	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
AVE	3	4	3	3	3	3	4	4	3	3	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	4
PK	12	13	12	11	8	11	13	12	9	8	10	11	10	11	10	10	10	10	8	10	9	9	11	12	13	11

WIND SPEED @10M

C-B TRACT  
MRI AD42  
February 1981

DATA NOT AVAILABLE AT REPORT TIME

WIND SPEED @10M

C-B TRACT  
MRI AD56  
February 1981

DATA NOT AVAILABLE AT REPORT TIME

WIND DIRECTION @10M  
DEGREES

CB-TRACT  
TRAILER AR20  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	(CM)	117	(CM)	(CM)	(CM)	(CM)	(CM)	112	110	(CM)	302	316	350	346	343	327	340	43	106	109	106	115	134	137	63
2	140	138	134	141	141	141	138	143	140	140	140	118	109	113	132	174	183	109	98	131	136	139	142	141	136
3	132	133	134	132	130	133	(VA)	(CM)	(CM)	225	287	284	280	240	300	195	(VA)	255	105	86	102	95	97	103	148
4	107	105	103	(CM)	120	135	135	(CM)	(CM)	105	(CM)	258	270	265	270	265	330	0	(VA)	95	93	105	105	130	117
5	132	105	100	107	128	135	133	110	130	126	(IM)	285	(IM)	265	215	205	150	98	92	90	125	130	120	102	128
6	95	93	125	128	135	105	135	132	135	136	105	270	285	335	6	235	300	270	102	95	93	100	120	90	113
7	125	135	130	105	130	135	122	130	130	134	120	300	300	275	270	280	284	(VA)	105	95	105	105	120	135	130
8	123	135	110	95	93	90	93	100	105	100	165	195	220	225	215	220	195	120	85	85	90	92	90	105	124
9	100	98	90	86	75	90	75	102	105	150	165	220	243	260	225	210	215	210	225	180	110	100	90	260	146
10	272	265	0	285	290	275	275	280	283	275	270	285	270	310	320	330	10	65	105	125	122	135	130	135	289
11	135	132	125	120	102	102	110	125	133	110	180	175	168	165	162	160	180	135	120	115	105	120	120	118	134
12	105	128	118	115	110	123	130	90	120	105	108	120	240	225	110	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	122
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	229	217	207	132	111	125	134	136	140	136	( )
14	139	130	132	121	114	107	104	134	134	119	270	264	219	178	174	195	202	(CM)	79	95	118	120	136	129	140
15	121	115	132	125	117	104	117	99	139	135	325	31	343	106	127	101	286	347	19	62	104	140	138	124	102
16	136	131	106	106	105	126	140	139	136	138	124	105	185	130	132	176	215	222	58	113	117	133	137	137	134
17	139	129	118	120	127	136	134	134	131	259	109	107	(CM)	268	290	268	321	8	(CM)	45	81	109	90	117	116
18	106	109	133	130	129	(CM)	(CM)	122	136	138	135	336	87	191	204	161	126	114	122	110	104	107	120	125	126
19	143	130	130	126	118	127	111	133	137	134	153	175	193	196	174	174	166	166	215	74	107	111	130	124	143
20	112	121	122	121	109	107	106	295	299	303	346	337	315	359	316	(CM)	(CM)	(CM)	99	343	332	330	305	317	359
21	307	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	51	(CM)	313	331	337	277	315	271	282	321	8	63	71	120	136	137	139	347
22	140	146	117	131	142	142	145	135	141	143	270	278	297	305	271	285	277	45	90	107	123	137	118	140	145
23	141	136	140	140	140	140	132	133	138	126	162	168	180	175	163	176	182	186	106	127	130	134	133	132	146
24	123	125	120	132	120	130	115	118	123	145	180	165	171	178	176	183	184	144	122	122	101	101	99	101	136
25	109	103	103	116	122	131	125	114	132	146	165	161	176	179	203	194	169	161	107	111	98	102	111	101	134
26	99	130	111	116	101	(CM)	136	135	131	111	109	128	131	127	155	(MT)	(CM)	122	126	86	117	102	91	99	117
27	(CM)	142	106	75	(CM)	117	107	124	129	118	93	121	130	161	155	188	173	155	98	99	105	100	109	137	124
28	135	132	142	132	104	124	130	130	133	125	221	228	213	181	184	159	204	189	117	(CM)	105	101	106	102	145
PV	125	126	118	119	118	124	123	121	131	136	161	225	230	218	209	209	219	127	103	99	108	114	118	123	126



WIND DIRECTION @ 10M  
DEGREES

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	299	310	290	248	278	294	271	263	264	305	328	334	355	346	352	348	358	339	312	313	310	34	308	(CM)	314
2	328	315	311	339	307	132	320	135	104	75	(CM)	208	229	209	227	215	218	210	196	153	161	108	130	109	192
3	104	105	115	112	125	135	125	111	119	97	23	291	251	262	221	226	263	279	251	237	242	203	220	251	191
4	215	299	240	244	189	145	270	221	237	307	5	337	331	316	312	328	321	318	263	251	235	224	(CM)	233	272
5	143	256	246	211	130	259	230	197	229	79	28	4	19	232	211	216	217	210	199	196	161	182	180	77	201
6	110	107	130	107	86	119	166	174	153	215	248	255	259	306	351	341	293	333	260	221	224	225	230	220	213
7	215	215	231	200	119	195	225	204	94	58	349	19	341	280	276	286	292	272	207	213	210	202	180	201	228
8	217	200	192	207	191	193	209	208	206	205	216	214	228	223	221	222	218	216	211	215	217	215	209	97	209
9	194	224	218	220	221	210	214	219	205	219	224	230	232	253	241	221	225	223	224	228	229	224	239	250	224
10	261	268	310	335	316	285	298	273	303	306	307	312	321	327	338	338	37	81	198	186	173	190	163	144	292
11	161	186	163	131	181	181	169	159	152	210	208	201	222	215	217	220	208	215	191	169	204	129	208	219	189
12	205	117	170	122	133	126	152	189	128	207	251	184	232	226	209	198	217	200	192	105	103	136	120	98	167
13	115	176	93	126	174	131	124	120	81	66	323	214	211	224	213	202	196	179	136	115	130	107	95	152	146
14	162	174	101	122	79	29	51	124	132	214	273	231	225	219	217	230	231	221	214	180	9	(CM)	105	297	185
15	302	332	93	145	119	121	220	253	151	270	217	287	330	87	75	247	226	278	265	245	198	211	112	164	215
16	124	127	186	217	214	205	165	248	270	74	170	253	246	179	184	202	218	219	208	121	118	131	124	113	181
17	121	104	130	119	140	179	180	187	229	330	137	130	239	234	252	292	349	357	251	237	231	76	225	209	195
18	217	225	130	222	170	184	175	215	138	139	2	304	242	219	227	204	207	186	183	196	212	95	85	136	189
19	145	189	175	135	107	128	99	114	112	179	213	197	221	(PF)	(PF)	(PF)	215	140	135	188	198	193	181	182	165
20	191	199	197	198	207	207	227	293	301	321	345	339	4	357	2	75	135	153	332	17	4	347	346	326	314
21	312	258	307	270	229	265	261	312	352	348	350	5	0	339	328	322	356	347	270	219	219	(CM)	221	220	299
22	161	217	245	99	227	196	253	231	85	51	353	12	13	61	306	357	351	326	221	218	94	90	104	121	74
23	114	92	113	107	124	111	111	98	90	233	225	220	229	218	212	210	215	202	166	117	140	129	117	119	151
24	117	134	122	129	122	142	148	143	105	(MT)	206	206	217	212	217	221	215	205	201	184	201	197	168	122	170
25	109	181	182	176	159	160	184	201	188	195	209	189	202	205	214	213	210	201	187	182	175	163	159	172	185
26	156	132	109	141	197	200	197	184	188	159	176	184	180	187	192	190	221	237	200	195	208	194	196	204	185
27	219	222	219	211	90	189	192	112	79	16	336	29	45	20	31	80	183	185	215	239	233	231	217	199	190
28	227	152	196	194	190	142	132	122	125	243	232	218	226	216	214	198	214	215	209	219	186	194	102	225	194
PV	175	190	178	169	163	172	192	187	150	223	278	254	259	244	244	237	234	228	215	199	195	170	166	175	200

WIND DIRECTION @ 30M  
DEGREES

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	297	312	295	259	281	292	268	262	265	300	325	329	350	341	346	341	356	358	83	84	117	59	79	(CM)	326
2	138	121	125	(CM)	241	106	122	116	113	85	117	127	138	126	130	122	123	118	114	112	118	111	118	117	121
3	102	94	97	96	97	103	109	(CM)	114	96	31	132	142	148	126	129	138	287	263	262	281	180	124	321	120
4	(CM)	332	256	264	217	(CM)	135	129	145	(CM)	5	339	330	313	312	325	321	325	293	273	255	232	99	(CM)	296
5	74	323	310	216	(CM)	95	114	129	129	63	30	4	15	132	120	122	122	119	112	113	113	114	118	94	100
6	98	95	110	106	80	93	110	113	109	130	141	144	147	172	346	332	289	332	291	234	232	130	146	133	123
7	136	73	107	123	120	145	121	122	117	101	336	14	336	274	271	281	289	270	205	210	161	117	112	119	134
8	132	115	111	116	111	112	119	118	119	118	124	123	130	127	126	126	124	124	119	123	125	122	118	100	120
9	118	128	126	125	127	121	123	127	119	125	128	131	133	144	136	126	127	126	128	131	132	129	137	143	129
10	148	152	149	335	316	287	298	272	300	303	304	309	319	324	333	334	36	71	114	119	122	112	120	103	347
11	116	115	117	112	117	115	117	119	115	122	122	119	129	125	125	129	121	124	115	111	120	102	121	126	119
12	122	94	115	102	111	109	119	119	102	111	157	120	139	130	124	118	123	114	109	132	87	107	105	113	116
13	117	113	89	79	118	98	106	109	87	66	333	120	123	127	120	117	114	116	106	98	105	90	86	115	103
14	118	114	79	98	71	49	47	97	102	121	142	131	128	125	124	130	130	124	123	115	59	(CM)	105	162	109
15	176	191	79	139	118	122	150	156	106	248	101	274	40	69	64	258	220	275	279	273	114	117	127	(CM)	145
16	105	90	112	131	125	176	112	109	270	59	101	139	137	119	119	119	121	123	120	110	78	98	99	103	114
17	115	94	104	94	98	115	113	117	127	326	132	99	136	136	197	290	341	0	263	244	241	63	140	145	120
18	118	133	109	123	134	86	115	122	117	97	358	318	217	123	127	118	118	113	117	110	118	107	90	119	114
19	118	118	113	115	114	111	86	94	93	115	120	115	126	(PF)	(PF)	(PF)	128	96	101	124	112	111	118	115	112
20	112	114	114	114	120	120	130	165	172	184	335	333	0	14	358	60	99	112	333	11	359	348	345	334	60
21	336	341	4	5	(CM)	279	297	326	346	348	346	0	354	336	325	317	352	346	355	126	122	(CM)	124	346	346
22	(CM)	115	159	59	(CM)	121	180	244	83	52	344	2	356	49	303	350	346	327	124	122	115	117	90	107	72
23	115	90	92	88	100	104	111	109	87	117	129	129	133	125	122	120	121	116	120	89	109	98	91	98	109
24	95	115	88	95	97	111	109	104	85	(MT)	119	119	125	123	124	127	123	118	115	109	115	112	117	101	110
25	101	121	125	124	113	112	115	115	119	122	120	121	119	120	122	123	121	118	113	120	111	120	114	121	118
26	114	98	90	103	116	116	116	120	120	120	122	120	123	120	118	118	134	137	123	129	129	129	129	127	120
27	128	130	129	127	126	126	126	120	71	23	336	36	48	21	32	79	119	120	121	142	251	242	212	81	103
28	125	122	124	120	123	108	96	101	100	134	135	129	131	127	125	121	124	124	121	127	103	34	56	135	116
PV	117	107	108	109	116	112	116	123	109	97	77	93	105	112	105	103	111	102	119	127	121	110	111	114	107

WIND DIRECTION @ 60M  
DEGREES

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	173	183	175	135	165	163	150	140	150	180	195	200	220	210	225	215	220	235	270	165	75	(VA)	(VA)	3	184
2	20	28	85	80	90	78	70	85	68	45	105	100	93	(VA)	105	80	83	75	73	75	75	63	79	75	76
3	60	45	33	7	10	0	(VA)	170	315	337	275	(VA)	105	135	93	100	(VA)	165	150	155	165	108	(CM)	228	91
4	225	165	157	143	138	76	(CM)	(VA)	140	100	270	210	183	195	183	195	185	200	190	165	150	133	65	(CM)	167
5	350	345	(CM)	123	70	345	343	0	17	330	276	225	243	92	83	82	80	80	71	75	68	73	78	45	46
6	(VA)	35	58	60	43	(VA)	3	34	45	105	120	119	132	173	218	210	165	198	165	135	128	135	170	130	121
7	165	(VA)	(VA)	105	(VA)	67	95	103	102	134	203	240	205	145	137	153	165	135	90	102	97	103	90	64	124
8	112	76	74	86	73	75	89	85	89	85	88	88	105	90	92	94	90	92	83	90	92	89	76	(VA)	88
9	82	100	92	91	93	85	89	100	87	91	102	108	105	137	105	94	92	90	90	102	95	87	102	120	97
10	137	137	195	210	190	163	168	150	173	177	170	193	196	200	207	200	268	308	18	60	62	65	48	35	166
11	72	82	80	65	90	70	73	60	65	86	79	73	103	79	90	91	78	76	(VA)	58	88	30	90	92	77
12	90	41	73	77	72	62	58	63	23	(VA)	103	42	95	105	72	89	77	71	90	45	45	60	73	73	70
13	75	50	45	5	50	45	35	60	330	300	195	100	90	87	75	70	65	50	30	20	25	20	15	45	46
14	55	55	355	30	330	(VA)	(VA)	15	35	90	140	97	85	90	85	95	100	85	80	78	140	155	(VA)	150	80
15	180	195	315	5	355	0	65	160	75	180	205	150	(VA)	(VA)	(VA)	(VA)	105	152	170	175	(VA)	85	110	(VA)	133
16	72	35	(VA)	90	95	100	(VA)	45	148	305	(VA)	135	(VA)	50	62	75	78	90	90	45	(VA)	10	20	58	68
17	75	13	25	6	0	75	80	90	110	150	90	(VA)	130	120	135	165	210	240	165	135	150	225	135	165	120
18	75	115	330	45	0	3	8	63	73	(VA)	230	255	120	90	105	75	63	60	55	70	75	(VA)	4VA	0	57
19	80	78	66	80	85	60	(VA)	15	7	52	86	73	90	(PF)	(PF)	(VA)	(VA)	(VA)	(VA)	(VA)	75	70	57	60	66
20	73	73	70	75	90	80	105	150	168	183	213	210	225	215	225	290	355	30	210	235	238	220	220	215	181
21	213	240	243	230	280	180	200	210	212	215	215	225	245	215	205	205	210	220	228	75	105	68	25	305	217
22	(VA)	350	150	315	340	20	(VA)	130	327	300	215	195	230	(VA)	180	210	215	215	165	93	78	90	(VA)	80	181
23	83	48	6	3	18	33	40	43	18	45	90	93	90	80	75	78	78	75	48	27	45	6	13	18	48
24	20	45	18	13	50	30	27	18	355	(MT)	78	78	89	84	87	92	86	79	76	70	75	68	51	17	54
25	34	54	30	28	17	56	68	61	56	66	79	59	71	76	84	84	80	76	63	53	47	42	36	30	56
26	24	6	0	29	68	73	70	55	60	35	50	56	53	58	65	62	94	106	78	75	79	70	73	78	60
27	88	91	90	87	78	89	72	71	27	264	205	274	277	252	265	320	44	53	82	119	151	143	114	42	83
28	69	50	55	59	49	22	4	43	19	101	98	82	93	82	80	69	83	85	80	98	85	259	166	109	72
PV	81	61	55	60	55	61	66	77	59	93	152	130	127	119	115	109	101	100	98	90	91	81	76	65	95



WIND DIRECTION @10M

C-B TRACT  
MRI AD42  
February 1981

DATA NOT AVAILABLE AT REPORT TIME

WIND DIRECTION @10M

C-B TRACT  
MRI AD56  
February 1981

DATA NOT AVAILABLE AT REPORT TIME



WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
10 METER LEVEL

CH-TRACT  
TRAILER AR20  
FEB 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)										VECTOR																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL	
1	***	117	***	***	***	***	***	112	110	***	302	316	350	346	343	327	340	43	106	109	106	115	134	137	137	17	0.6
2	140	138	134	141	141	141	138	143	140	140	140	118	109	113	132	174	183	109	98	131	136	139	142	141	137	3.0	
3	132	133	134	132	130	133	***	***	***	225	287	284	280	240	300	195	***	255	105	86	102	95	97	103	134	1.6	
4	107	105	103	***	120	135	135	***	***	105	***	258	270	265	270	265	330	0	***	95	93	105	105	130	212	0.2	
5	132	105	100	107	128	135	133	110	130	126	***	285	***	265	215	205	150	98	92	90	125	130	120	102	135	1.4	
6	95	93	125	128	135	105	135	132	135	136	105	270	285	335	6	235	300	270	102	95	93	100	120	90	122	0.7	
7	125	135	130	105	130	135	122	130	130	134	120	300	300	275	270	280	284	***	105	95	105	105	120	135	148	1.0	
8	123	135	110	95	93	90	93	100	105	100	165	195	220	225	215	220	195	120	85	85	90	92	90	105	143	1.4	
9	100	98	90	86	75	90	75	102	105	150	165	220	243	260	225	210	215	210	225	180	110	100	90	260	178	0.8	
10	272	265	0	285	290	275	275	280	283	275	270	285	270	310	320	330	10	65	105	125	122	135	130	135	281	1.6	
11	135	132	125	120	102	120	110	125	133	110	180	175	168	165	162	160	180	135	120	115	105	120	120	118	135	2.4	
12	105	128	118	115	110	123	130	90	120	105	108	120	240	225	110	***	***	***	***	***	***	***	***	***	***	124	1.6
13	***	***	***	***	***	***	***	***	***	***	***	***	***	***	229	217	207	132	111	125	134	136	140	136	***	***	
14	139	130	132	121	114	107	104	134	134	119	270	264	219	178	174	195	202	***	79	95	118	120	136	129	138	1.4	
15	121	115	132	125	117	104	117	99	139	135	325	31	343	106	127	101	286	347	19	62	104	140	138	124	110	0.6	
16	136	131	106	106	105	126	140	139	136	138	124	105	185	130	132	176	215	222	58	113	117	133	137	137	136	1.7	
17	139	129	118	120	127	136	134	134	131	259	109	107	***	268	290	268	321	8	***	45	81	109	90	117	126	1.0	
18	106	109	133	130	129	***	***	122	136	138	135	336	87	191	204	161	126	114	122	110	104	107	120	125	130	1.2	
19	143	130	130	126	118	127	111	133	137	134	153	175	193	196	174	174	166	166	215	74	107	111	130	124	141	2.1	
20	112	121	122	121	109	107	106	295	299	303	346	337	315	359	316	***	***	***	99	343	332	330	305	317	349	0.4	
21	307	***	***	***	***	***	***	51	***	313	331	337	277	315	271	282	321	8	63	71	120	136	137	139	305	0.4	
22	140	146	117	131	142	142	145	135	141	143	270	278	297	305	271	285	277	45	90	107	123	137	118	140	156	0.6	
23	141	136	140	140	140	140	132	133	138	126	162	168	180	175	163	176	182	186	106	127	130	134	133	132	142	2.7	
24	123	125	120	132	120	130	115	118	123	145	180	165	171	178	176	183	184	144	122	122	101	101	99	101	138	2.9	
25	109	103	103	116	122	131	125	114	132	146	165	161	176	179	203	194	169	161	107	111	98	102	111	101	145	2.2	
26	99	130	111	116	101	***	136	135	131	111	109	128	131	127	155	***	***	122	126	86	117	102	91	99	121	2.6	
27	***	142	106	75	***	117	107	124	129	118	93	121	130	161	155	188	173	155	98	99	105	100	109	137	128	0.9	
28	135	132	142	132	104	124	130	130	133	125	221	228	213	181	184	159	204	189	117	***	105	101	106	102	153	1.1	
VD	131	132	117	123	123	129	125	128	134	134	157	211	227	226	216	217	224	127	105	105	113	121	124	129	138		
VV	2.0	1.9	1.9	1.9	1.9	2.1	1.9	1.7	2.3	1.5	1.0	0.8	1.2	1.0	1.3	1.5	0.8	0.5	0.9	1.2	1.4	1.9	2.1	2.0		1.2	

TOTAL NUMBER OF OBSERVATIONS = 609

NOTE: \*\*\* = MISSING DATA

WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
10 METER LEVEL

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	1	2	3	4	5	6	7	8	9	10	11	HOUR (LOCAL STANDARD TIME)				16	17	18	19	20	21	22	23	24	VECTOR DIR VEL	
1	299	310	290	248	278	294	271	263	264	305	328	334	355	346	352	348	358	339	312	313	310	34	308	***	318	1.9
2	328	315	311	339	307	132	320	135	104	75	***	208	229	209	227	215	218	210	196	153	161	108	130	109	199	0.8
3	104	105	115	112	125	135	125	111	119	97	23	291	251	262	221	226	263	279	251	237	242	203	220	251	192	0.5
4	215	299	240	244	189	145	270	221	237	307	5	337	331	316	312	328	321	318	263	251	235	224	***	233	279	0.8
5	143	256	246	211	130	259	230	197	229	79	28	4	19	232	211	216	217	210	199	196	161	182	180	77	210	0.9
6	110	107	130	107	86	119	166	174	153	215	248	255	259	306	351	341	293	333	260	221	224	225	230	220	258	0.9
7	215	215	231	200	119	195	225	204	94	58	349	19	341	280	276	286	292	272	207	213	210	202	180	201	259	0.9
8	217	200	192	207	191	193	209	208	206	205	216	214	228	223	221	222	218	216	211	215	217	215	209	97	213	3.8
9	194	224	218	220	221	210	214	219	205	219	224	230	232	253	241	221	225	223	224	228	229	224	239	250	226	4.7
10	261	268	310	335	316	285	298	273	303	306	307	312	321	327	338	338	37	81	198	186	173	190	163	144	291	1.8
11	161	186	163	131	181	181	169	159	152	210	208	201	222	215	217	220	208	215	191	169	204	129	208	219	201	2.7
12	205	117	170	122	133	126	152	189	128	207	251	184	232	226	209	198	217	200	192	105	103	136	120	98	178	1.1
13	115	176	93	126	174	131	124	120	81	66	323	214	211	224	213	202	196	179	136	115	130	107	95	152	161	1.3
14	162	174	101	122	79	29	51	124	132	214	273	231	225	219	217	230	231	221	214	180	9	***	105	297	206	1.4
15	302	332	93	145	119	121	220	253	151	270	217	287	330	87	75	247	226	278	265	245	198	211	112	164	221	0.4
16	124	127	186	217	214	205	165	248	270	74	170	253	246	179	184	202	218	219	208	121	118	131	124	113	186	1.1
17	121	104	130	119	140	179	180	187	229	330	137	130	239	234	252	292	349	357	251	237	231	76	225	209	208	0.6
18	217	225	130	222	170	184	175	215	138	139	2	304	242	219	227	204	207	186	183	196	212	95	85	136	196	1.5
19	145	189	175	135	107	128	99	114	112	179	213	197	221	***	***	***	215	140	135	188	198	193	181	182	184	2.2
20	191	199	197	198	207	207	227	293	301	321	345	339	4	357	2	75	135	153	332	17	4	347	346	326	256	1.3
21	312	258	307	270	229	265	261	312	352	348	350	5	0	339	328	322	356	347	270	219	219	***	221	220	320	0.8
22	161	217	245	99	227	196	253	231	85	51	353	12	13	61	306	357	351	326	221	218	94	90	104	121	345	0.1
23	114	92	113	107	124	111	111	98	90	233	225	220	229	218	212	210	215	202	166	117	140	129	117	119	170	1.4
24	117	134	122	129	122	142	148	143	105	***	***	206	217	212	217	221	215	205	201	184	201	197	168	122	190	3.1
25	109	181	182	176	159	160	184	201	188	195	209	189	202	205	214	213	210	201	187	182	175	163	159	172	190	4.3
26	156	132	109	141	197	200	197	184	188	159	176	184	180	187	192	190	221	237	200	195	208	194	196	204	187	4.5
27	227	219	222	211	90	189	192	112	79	16	336	29	45	20	31	80	183	185	215	239	233	231	197	199	213	1.0
28	227	152	196	194	190	142	132	122	125	243	232	218	226	216	214	198	214	215	209	219	186	194	102	225	205	1.6
VD	195	198	185	179	182	184	197	200	187	225	238	226	235	238	233	228	228	222	208	204	203	187	178	183	210	
VV	1.1	1.2	1.0	1.1	1.1	1.3	1.4	1.1	0.7	0.6	1.4	1.5	1.8	2.0	2.1	2.3	2.2	1.8	2.1	1.6	1.6	1.4	1.2	1.3		1.4

TOTAL NUMBER OF OBSERVATIONS = 662

NOTE: \*\*\*\* = MISSING DATA

WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
30 METER LEVEL

CH-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	1	2	3	4	5	6	7	8	9	10	11	HOUR (LOCAL STANDARD TIME)				16	17	18	19	20	21	22	23	24	VECTOR	
												12	13	14	15										DIR	VEL
1	297	312	295	259	281	292	268	262	265	300	325	329	350	341	346	341	356	358	83	84	117	59	79	***	314	2.5
2	138	121	125	***	241	106	122	116	113	85	117	127	138	126	130	122	123	118	114	112	118	111	118	117	314	2.0
3	102	94	97	96	97	103	109	***	114	96	31	132	142	148	126	129	138	287	263	262	281	180	124	321	122	0.8
4	***	332	256	264	217	***	***	135	145	***	5	339	330	313	312	325	321	325	293	273	255	232	99	***	296	1.2
5	74	323	310	216	***	95	114	129	129	63	30	4	15	132	120	122	122	119	112	113	113	114	118	94	112	1.8
6	98	95	110	106	80	93	110	113	109	130	141	144	147	172	346	332	289	332	291	234	232	130	146	133	140	1.1
7	136	73	107	123	120	145	121	122	117	101	336	14	336	274	271	281	289	270	205	210	161	117	112	119	232	0.6
8	132	115	111	116	111	112	119	118	119	118	124	123	130	127	126	126	124	124	119	123	125	122	118	100	121	5.9
9	118	128	126	125	127	121	123	127	119	125	128	131	133	144	136	126	127	126	128	131	132	129	137	143	129	6.9
10	148	152	149	335	316	287	298	272	300	303	304	309	319	324	333	334	36	71	114	119	122	112	120	103	309	0.4
11	116	115	117	112	117	115	117	119	115	122	122	119	129	125	125	129	121	124	115	111	120	102	121	126	120	4.3
12	122	94	115	102	111	109	119	119	102	111	157	120	139	130	124	118	123	114	109	132	87	107	105	113	115	2.1
13	117	113	89	79	118	98	106	109	87	66	333	120	123	127	120	117	114	116	106	98	105	90	86	115	108	2.6
14	118	114	79	98	71	49	47	97	102	121	142	131	128	125	124	130	130	124	123	115	59	***	105	162	118	3.0
15	176	191	79	139	118	122	150	156	106	248	101	274	40	68	64	258	220	275	279	273	114	117	127	***	158	0.7
16	105	90	112	131	125	176	112	109	270	59	101	139	137	119	119	119	121	123	120	110	78	98	99	103	115	2.1
17	115	94	104	94	98	115	113	117	127	326	132	99	136	136	197	290	341	0	263	244	241	63	140	145	124	1.0
18	118	133	109	123	134	86	115	122	117	97	358	318	217	123	127	118	118	113	117	110	118	107	90	119	116	2.5
19	118	118	113	115	114	111	86	94	93	115	120	115	126	***	***	***	128	96	101	124	112	111	118	115	113	3.6
20	112	114	114	114	120	120	130	165	172	184	335	333	0	14	358	60	99	112	333	11	359	348	345	334	113	2.5
21	336	341	4	5	***	279	297	326	346	348	346	0	354	336	325	317	352	346	355	126	122	***	***	124	344	1.2
22	***	115	159	59	***	121	180	244	83	52	344	2	356	49	303	350	346	327	124	122	115	117	90	107	41	0.4
23	115	90	92	88	100	104	111	109	87	117	129	129	133	125	122	120	121	116	120	89	109	98	91	98	111	2.9
24	95	115	88	95	97	111	109	104	85	***	***	119	125	123	124	127	123	118	115	109	115	112	117	101	114	5.4
25	101	121	125	124	113	112	115	115	119	122	120	121	119	120	122	123	121	118	113	120	111	120	114	121	118	6.7
26	114	98	90	103	116	116	116	120	120	120	122	120	123	120	118	118	134	137	123	129	129	129	129	127	119	6.9
27	128	130	129	127	126	126	126	120	71	23	336	36	48	21	32	70	119	120	121	142	251	242	212	81	120	1.7
28	125	122	124	120	123	108	96	101	100	134	135	129	131	127	125	121	124	124	121	127	103	34	56	135	121	2.5
VD	121	118	111	113	113	113	118	127	119	117	112	112	121	122	117	118	121	114	122	125	122	114	115	118	117	
VV	2.4	2.5	2.3	2.1	2.2	2.2	2.3	2.2	1.7	1.5	1.9	2.2	2.5	2.7	2.5	2.6	2.6	2.4	2.7	2.3	2.4	2.7	2.5	2.6		2.3

TOTAL NUMBER OF OBSERVATIONS = 651

NOTE: \*\*\*\* = MISSING DATA



## WIND DIRECTION AND

## CB-TRACT

VECTOR AVERAGE VELOCITY (DEG & MPS)  
60 METER LEVEL

TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																								VECTOR	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL
1	173	183	175	135	165	163	150	140	150	180	195	200	220	210	225	215	220	235	270	165	75	***	***	3	182	2.8
2	20	28	85	80	90	78	70	85	68	45	105	100	93	***	105	80	83	75	73	75	75	63	79	75	75	2.5
3	60	45	33	7	10	0	***	170	315	337	275	***	105	135	93	100	***	165	150	155	165	108	***	228	105	0.7
4	225	165	157	143	138	76	***	***	140	100	270	210	183	195	183	195	185	200	190	165	150	133	65	***	171	1.3
5	350	345	***	123	70	345	343	0	17	330	276	225	243	92	83	82	80	80	71	75	68	73	78	45	67	1.7
6	***	35	58	60	43	***	3	34	45	105	120	119	132	173	218	210	165	198	165	135	128	135	170	130	137	1.9
7	165	***	***	105	***	67	95	103	102	134	203	240	205	145	137	153	165	135	90	102	97	103	90	64	126	2.3
8	112	76	74	86	73	75	89	85	89	85	89	88	105	90	92	94	90	92	83	90	92	89	76	***	87	6.1
9	82	100	92	91	93	85	89	100	87	91	102	108	105	137	105	94	92	90	90	102	95	87	102	120	97	6.3
10	137	137	195	210	190	163	168	150	173	177	170	193	196	200	207	200	268	308	18	60	62	65	48	35	161	2.3
11	72	82	80	65	90	70	73	60	65	86	79	73	103	79	90	91	78	76	***	58	88	30	90	92	80	4.6
12	90	41	73	77	72	62	58	63	23	***	103	42	95	105	72	89	77	71	90	45	45	60	73	73	73	2.9
13	75	50	45	5	50	45	35	60	330	300	195	100	90	87	75	70	65	50	30	20	25	20	15	45	50	2.8
14	55	55	355	30	330	***	***	15	35	90	140	97	85	90	85	95	100	85	80	78	140	155	***	150	84	3.5
15	180	195	315	5	355	0	65	160	75	180	205	150	***	***	***	***	105	152	170	175	***	85	110	***	122	0.9
16	72	35	***	90	95	100	***	45	148	305	***	135	***	50	62	75	78	90	90	45	***	10	20	58	71	2.5
17	75	13	25	6	0	75	80	90	110	150	90	***	130	120	135	165	210	240	165	135	150	225	135	165	111	1.6
18	75	115	330	45	0	3	8	63	73	***	230	255	120	90	105	75	63	60	55	70	75	***	***	0	64	2.8
19	80	78	66	80	85	60	***	15	7	52	86	73	90	***	***	***	***	***	***	***	75	70	57	60	66	4.9
20	73	73	70	75	90	80	105	150	168	183	213	210	225	215	225	290	355	30	210	235	238	220	220	215	129	2.7
21	213	240	243	230	280	180	200	210	212	215	215	225	245	215	205	205	210	220	228	75	105	68	25	305	212	1.7
22	***	350	150	315	340	20	***	130	327	300	215	195	230	***	180	210	215	215	165	93	78	90	***	80	161	0.6
23	83	48	6	3	18	33	40	43	18	45	90	93	90	80	75	78	78	75	48	27	45	6	13	18	54	3.1
24	20	45	18	13	50	30	27	18	355	***	***	78	89	84	87	92	86	79	76	70	75	68	51	17	63	5.6
25	34	54	30	28	17	56	68	61	56	66	79	59	71	76	84	84	80	76	63	53	47	42	36	30	59	7.1
26	24	6	0	29	68	73	70	55	60	35	50	56	53	58	65	62	94	106	78	75	79	70	73	78	59	7.4
27	88	91	90	87	78	89	72	71	27	264	205	274	277	252	265	320	44	53	82	119	151	143	114	42	88	2.1
28	69	50	55	59	49	22	4	43	19	101	98	82	93	82	80	69	83	85	80	98	85	259	166	109	75	2.5
VD	85	73	63	63	64	68	75	81	76	93	112	98	106	105	101	98	94	90	83	83	84	73	69	67	84	
VV	2.5	2.6	2.1	2.2	2.0	2.8	3.2	2.6	1.6	1.4	2.2	2.4	2.8	3.2	3.1	3.3	3.4	3.0	3.5	3.0	3.4	2.8	2.9	2.6	2.6	2.6

TOTAL NUMBER OF OBSERVATIONS = 621

NOTE: \*\*\* = MISSING DATA

SIGMA HORIZ. WIND DIR. @10M  
DEGREES

CB-TRACT  
TRAILER AB20  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(CM)	4	(CM)	(CM)	(CM)	(CM)	(CM)	3	3	(CM)	13	14	19	24	18	16	15	18	6	11	8	9	11	8	12	24
2	8	4	(IM)	(IM)	(IM)	(IM)	(IM)	8	4	4	4	3	3	7	12	18	13	11	10	9	7	5	5	5	7	18
3	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
4	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
5	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
6	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
7	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
8	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
9	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
11	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
14	11	12	8	12	17	19	11	9	8	2	19	5	15	15	17	17	15	8	8	8	7	5	6	8	( )	17
15	3	1	3	5	8	4	5	2	5	1	7	8	6	8	12	19	21	(CM)	3	1	6	5	10	5	11	21
16	4	3	1	2	4	7	5	6	2	4	2	7	14	13	15	14	12	5	16	2	1	5	3	1	5	16
17	6	7	9	7	8	4	8	7	4	9	10	10	(CM)	13	11	17	15	13	4	6	6	4	5	5	7	15
18	4	4	5	4	9	(CM)	(CM)	9	4	3	7	7	5	16	15	10	7	5	7	10	11	5	23	7	10	23
19	5	7	8	8	7	10	8	6	4	7	11	16	23	17	15	18	20	36	16	3	4	6	6	6	7	16
20	10	12	14	8	4	3	3	17	10	10	24	14	11	13	26	(CM)	(CM)	(CM)	4	11	20	18	13	9	12	36
21	6	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	7	(CM)	12	16	17	17	23	22	23	23	7	2	0	4	3	5	5	11	23
22	4	4	2	5	4	8	2	2	2	1	9	11	12	23	13	24	7	6	3	4	6	5	5	5	7	24
23	6	7	4	5	5	4	6	5	4	5	11	15	24	16	15	15	14	5	3	8	7	7	5	5	8	24
24	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	21	22	21	23	22	16	9	8	8	8	8	8	15	23
25	12	15	10	9	7	6	10	10	9	15	17	18	24	26	22	25	20	23	13	10	17	8	10	7	14	26
26	11	9	11	15	11	(CM)	14	11	15	7	10	11	12	21	20	(MT)	(CM)	11	12	9	9	6	6	13	12	21
27	(CM)	7	4	2	(CM)	5	6	8	3	3	6	22	21	20	23	16	9	5	7	2	4	3	8	5	9	23
28	5	7	7	7	8	12	11	5	4	1	20	29	25	25	21	17	23	17	8	(CM)	3	5	4	3	12	29
AV	7	7	7	7	( )	( )	( )	7	5	6	12	13	16	18	18	17	16	13	8	7	7	7	8	6	10	
PK	12	15	14	15	17	19	14	17	15	15	24	29	25	26	26	25	23	36	16	14	20	18	23	13		36



SIGMA HORIZ. WIND DIR. @ 10M  
DEGREES

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	7	6	6	6	6	7	7	7	6	12	9	10	12	11	13	15	10	3	1	1	3	3	6	(CM)	7	15
2	3	4	9	10	5	5	7	8	6	11	(CM)	28	28	32	20	9	9	7	7	21	26	24	9	17	13	32
3	7	5	5	4	4	4	12	8	11	10	14	33	21	13	15	16	17	5	5	6	7	4	7	5	10	33
4	9	10	5	5	4	2	10	3	9	24	27	25	18	16	14	18	11	6	7	6	4	10	(CM)	10	11	27
5	15	10	7	14	9	15	20	15	5	12	14	20	24	15	12	11	9	6	7	19	28	10	17	18	14	28
6	14	8	13	10	7	13	9	11	9	19	13	11	13	9	10	17	9	6	7	3	17	6	5	4	10	19
7	10	9	11	10	19	8	15	17	12	19	24	18	27	17	15	10	10	9	5	7	13	16	8	8	13	27
8	11	5	5	6	6	6	7	7	10	10	10	10	10	10	11	10	9	8	7	7	7	7	9	18	9	18
9	16	11	9	9	8	10	9	9	10	11	10	10	13	14	10	10	9	8	10	9	9	11	10	10	10	16
10	9	10	11	12	10	8	7	8	8	7	10	15	13	14	15	16	11	10	12	8	7	8	4	6	10	16
11	9	8	12	22	14	12	18	20	39	13	10	16	15	15	15	17	10	10	20	18	19	20	11	6	15	39
12	12	13	9	15	16	20	9	15	37	24	33	31	22	21	27	15	14	6	6	15	6	13	11	18	17	37
13	27	31	6	5	8	14	10	8	10	22	32	32	21	17	11	11	10	9	26	8	11	13	7	10	15	32
14	11	10	19	17	20	39	25	13	23	37	25	20	14	14	14	11	10	9	9	23	25	(CM)	21	23	19	39
15	9	8	7	6	7	9	8	13	13	25	27	28	25	36	26	22	10	11	11	7	6	10	16	13	16	47
16	16	11	6	8	10	13	17	12	15	26	27	19	19	18	13	12	10	7	7	11	7	6	5	10	13	28
17	19	6	16	7	8	6	14	13	15	14	15	19	19	14	20	11	20	13	9	4	6	17	7	10	13	20
18	4	16	8	11	8	13	6	13	17	29	15	37	29	16	16	13	9	5	5	6	9	11	20	7	13	37
19	13	19	18	33	23	18	8	8	10	13	13	12	12	(PF)	(PF)	43	32	32	36	38	8	7	5	6	18	43
20	9	9	8	9	9	8	10	10	9	9	15	16	28	16	10	25	13	8	16	9	11	8	9	7	12	28
21	10	16	28	11	5	5	7	21	15	17	16	19	30	16	21	18	26	8	12	3	17	(CM)	18	24	16	30
22	12	10	11	10	6	13	17	6	16	19	41	34	36	31	29	15	10	24	3	8	26	12	9	8	17	41
23	29	11	5	5	4	6	17	10	10	24	10	21	26	18	17	13	11	9	10	19	12	11	11	8	13	29
24	8	9	16	8	11	7	6	11	11	(MT)	(MT)	13	16	15	12	10	10	8	4	4	8	7	11	11	10	16
25	11	10	4	3	4	10	12	7	11	12	11	10	16	12	12	13	13	10	5	5	11	4	8	3	9	16
26	3	4	6	12	12	9	8	8	10	8	9	7	8	9	11	10	15	13	10	9	9	10	10	9	9	15
27	9	8	8	18	41	20	6	22	14	12	15	22	21	18	19	25	19	5	4	12	5	4	4	7	14	41
28	6	11	15	17	9	9	6	6	16	34	13	17	16	16	16	18	15	7	5	15	16	15	12	6	13	34
AV	11	10	10	11	10	11	11	11	13	18	18	20	20	17	16	14	13	9	10	11	12	10	10	11	13	
PK	29	31	28	33	41	39	25	22	39	37	47	39	36	36	29	25	43	32	36	38	28	24	21	24		47

SIGMA HORIZ. WIND DIR. @ 30M  
DEGREES

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE	PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	6	5	6	6	6	6	7	6	6	10	8	9	10	9	11	13	8	5	12	7	15	20	24	(CM)	9	24
2	22	9	14	(CM)	26	19	18	11	9	10	26	24	22	21	9	5	4	3	5	19	10	12	7	13	14	26
3	13	6	4	2	2	3	14	(CM)	7	8	13	26	11	6	7	9	21	6	4	7	11	10	15	8	9	26
4	(CM)	9	5	4	13	(CM)	(CM)	6	5	(CM)	27	24	15	14	15	18	10	5	6	5	5	8	(CM)	11	27	
5	8	19	13	9	(CM)	11	17	6	8	7	13	16	20	10	5	5	4	3	4	16	20	7	7	18	11	20
6	14	12	9	10	9	14	8	5	7	11	6	6	6	5	11	16	8	6	9	5	9	7	3	3	8	16
7	22	7	12	5	19	16	10	8	13	29	25	14	22	16	15	10	9	9	3	3	3	6	9	9	12	29
8	4	2	2	3	4	2	3	3	4	5	5	5	5	5	5	5	5	4	4	3	3	3	4	23	5	23
9	7	6	4	4	4	4	5	4	5	5	5	5	6	7	5	5	4	4	4	4	4	5	5	5	5	7
10	4	5	8	10	8	8	6	7	7	6	9	14	12	12	13	14	11	5	8	8	8	7	5	5	8	14
11	7	5	9	13	7	6	8	8	16	6	5	9	8	8	8	8	5	5	12	10	11	15	6	4	8	16
12	7	9	6	10	7	10	7	9	22	29	40	14	19	11	14	7	7	3	2	22	5	4	4	7	16	40
13	19	19	10	3	7	7	6	8	16	21	28	27	10	8	5	7	8	10	14	8	7	8	4	4	7	11
14	8	8	10	10	18	35	26	8	14	31	22	9	7	7	6	5	5	4	5	10	31	(CM)	28	13	14	35
15	4	11	7	4	6	7	6	6	9	29	40	39	30	22	21	18	9	10	10	9	11	4	20	(CM)	14	40
16	13	6	5	6	8	12	18	19	25	17	14	18	12	9	7	10	4	3	3	12	12	3	3	8	10	25
17	10	6	7	5	4	3	3	5	7	23	14	12	9	7	14	10	19	11	13	4	5	18	5	15	10	23
18	3	10	7	16	8	9	3	6	9	17	13	31	27	8	8	7	6	7	9	3	4	15	29	4	11	31
19	9	10	10	10	28	14	12	7	6	8	6	7	7	(PF)	(PF)	(PF)	28	22	20	32	4	5	11	11	13	32
20	6	4	4	5	5	4	5	5	4	4	18	17	29	22	9	17	7	6	8	8	9	7	7	7	9	29
21	7	11	13	11	(CM)	7	10	18	12	17	13	16	27	14	22	17	20	6	12	2	8	(CM)	10	13	27	
22	(CM)	6	30	4	(CM)	6	14	9	13	15	31	30	31	27	24	12	8	12	9	2	19	38	32	11	17	38
23	18	14	3	3	3	5	10	8	8	29	5	10	11	8	8	6	5	5	5	14	6	4	5	8	8	29
24	7	7	7	4	12	5	4	6	7	(MT)	(MT)	7	7	7	7	5	5	4	1	2	3	4	10	7	6	12
25	9	8	3	2	2	5	6	6	10	7	6	10	8	7	6	7	6	6	9	8	9	4	7	2	6	10
26	1	1	4	9	8	5	6	10	7	5	8	10	9	10	8	7	8	7	6	0	0	0	0	1	5	10
27	4	3	3	3	0	0	0	6	18	17	21	24	20	13	15	17	10	10	1	10	6	7	10	9	9	24
28	6	8	7	15	5	5	4	6	9	35	6	8	8	8	7	9	6	4	2	7	15	19	18	15	10	35
AV	9	8	8	7	9	8	9	8	10	15	16	16	15	11	11	10	9	7	7	9	9	9	11	9	10	
PK	22	19	30	16	28	35	26	19	25	35	40	39	31	27	24	18	28	22	20	32	31	38	32	23	40	

SIGMA HORIZ. WIND DIR. @ 60M  
DEGREES

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
2	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
3	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
4	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
5	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
6	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
7	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
8	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
9	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
11	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
14	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
15	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
16	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
17	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
18	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
19	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
20	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
21	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
22	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
23	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
24	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
25	12	9	4	4	3	6	6	7	8	10	9	11	12	12	12	9	8	6	2	2	4	5	7	8	8	12
26	2	2	7	11	10	7	6	6	8	6	7	6	6	8	9	7	12	11	8	3	10	3	7	2	7	13
27	5	4	4	7	9	4	2	1	12	29	16	19	15	14	14	25	15	6	2	8	6	4	7	10	10	29
28	6	10	12	14	6	10	8	13	13	43	10	15	14	13	12	15	11	7	4	9	23	15	14	17	13	43
AV ( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
PK	12	10	12	14	10	10	8	13	13	43	16	19	15	14	14	25	15	11	8	9	23	15	14	17	43	



CB-TRACT  
TRAILER AB20  
FEB 1981  
OCCIDENTAL OIL

[illegible][illegible]

MONTHLY MINIMUM = ( )

[illegible]

TEMPERATURE @ 10M  
DEGREE C

CB-TRACT  
TRAILER AA23  
FER 19R1  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	-8	-8	-8	-8	-8	-8	-8	-8	-8	-7	-6	-6	-7	-7	-7	-7	-7	-8	-9	-11	-11	-12	-12	-12	-8	-6
2	-13	-12	-13	-12	-12	-12	-11	-11	-12	-8	-4	-3	-2	-2	-2	-2	-2	-4	-5	-6	-6	-7	-7	-6	-7	-2
3	-8	-8	-8	-9	-8	-8	-8	-8	-7	-4	-1	1	3	3	3	3	3	-1	-2	-3	-4	-4	-6	-7	-4	3
4	-7	-8	-9	-9	-11	-9	-10	-10	-10	-9	-7	-4	-2	-1	0	1	1	-2	-4	-5	-6	-7	-7	-8	-5	1
5	-9	-10	-9	-9	-10	-9	-11	-9	-9	-7	-3	-1	1	2	2	2	1	-1	-2	-3	-3	-3	-4	-4	-5	2
6	-4	-4	-4	-6	-5	-3	-3	-3	-3	-2	1	1	1	1	0	1	1	1	-2	-3	-4	-4	-5	-6	-2	1
7	-7	-8	-7	-9	-9	-8	-9	-9	-8	-6	-4	-3	-2	-1	1	1	0	-1	-3	-4	-5	-5	-5	-4	-5	1
8	-4	-4	-5	-6	-6	-6	-6	-6	-4	-2	-1	0	2	2	2	3	2	1	-2	-2	-2	-2	-2	-2	-2	1
9	-2	-1	-1	-1	-1	-1	-2	-2	-2	-1	-1	0	1	1	2	1	1	1	-1	-1	-1	-1	-1	-1	-2	3
10	-1	-2	-5	-9	-12	-15	-18	-19	-19	-19	-19	-17	-16	-14	-14	-13	-13	-14	-16	-17	-16	-15	-14	-14	-14	-1
11	-13	-12	-12	-11	-11	-11	-10	-9	-8	-6	-5	-4	-3	-2	-2	-3	-4	-6	-6	-5	-5	-5	-4	-4	-7	-2
12	-4	-6	-4	-4	-5	-6	-6	-6	-4	-2	0	2	2	2	3	3	3	2	0	-2	-2	-3	-3	-3	-2	3
13	-3	-3	-3	-3	-3	-3	-4	-4	-2	2	4	6	6	7	7	7	6	4	3	2	2	1	0	2	1	7
14	3	3	2	2	3	3	2	2	3	4	6	7	7	7	7	8	8	6	4	4	3	3	3	4	4	8
15	3	2	1	-1	-1	-1	-2	-2	-1	2	3	4	5	6	7	7	6	4	3	2	2	2	1	1	2	7
16	2	2	2	1	0	-1	-1	-1	-1	3	5	7	8	8	8	8	8	7	5	3	3	3	2	2	3	8
17	3	2	3	2	2	3	3	4	4	4	3	5	7	7	8	7	8	5	3	3	2	1	1	1	4	8
18	1	-1	-1	-1	-1	-2	-1	-2	1	4	6	6	7	8	8	8	8	6	4	5	4	3	3	3	3	8
19	3	3	3	4	4	3	3	2	2	8	9	9	11	(PF)	(PF)	(PF)	10	8	8	7	7	7	7	7	6	11
20	8	8	8	7	7	7	7	4	2	1	-1	-3	-3	-4	-4	-4	-3	-3	-4	-5	-4	-4	-5	-8	0	8
21	-8	-8	-8	-9	-9	-9	-8	-8	-7	-7	-5	-4	-3	-2	-2	-2	-1	-2	-2	-3	-4	-4	-5	-6	-5	-1
22	-6	-6	-7	-7	-7	-7	-8	-8	-6	4	6	8	8	9	9	9	9	4	6	4	3	4	3	3	-2	9
23	-1	-2	-2	-2	-2	-2	-2	-2	0	4	6	8	8	9	9	12	11	8	6	4	3	4	5	4	6	12
24	2	1	1	2	3	3	2	3	4	8	8	9	10	10	11	11	10	10	8	6	6	7	5	4	6	11
25	4	4	4	4	5	6	3	4	7	8	8	9	10	10	11	11	10	8	6	6	6	5	4	5	6	11
26	4	4	3	4	6	6	6	5	3	0	1	1	1	2	3	1	0	1	-1	-1	-1	-1	-1	-1	2	6
27	-1	-1	-1	-2	-2	-2	-2	-4	-2	1	1	2	2	3	4	4	4	4	3	1	-1	-1	-1	-1	0	4
28	-1	-1	-1	-1	-1	-2	-3	-2	0	3	4	6	6	6	7	7	7	6	4	3	2	2	1	1	2	7
AV	-2	-3	-3	-3	-3	-4	-4	-4	-3	-1	0	1	2	2	3	3	3	2	0	-1	-1	-2	-2	-2	-1	
PK	8	8	8	7	7	7	7	5	7	8	9	9	11	11	12	12	11	10	8	7	7	7	7	7	7	12
MN	-13	-12	-13	-12	-12	-15	-18	-19	-19	-19	-19	-17	-16	-14	-14	-13	-13	-14	-16	-17	-16	-15	-14	-14	-14	

MONTHLY MINIMUM = -19



TEMPERATURE @ 30M  
DEGREE C

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-7	-6	-7	-8	-8	-7	-8	-8	-9	-10	-9	-11	-11	-11	-8	-6
2	-11	-11	-11	-11	-11	-10	-10	-11	-9	-8	-5	-4	-3	-2	-2	-2	-2	-4	-4	-6	-6	-6	-6	-6	-7	-2
3	-6	-7	-7	-7	-6	-6	-7	-7	-6	-4	-1	1	2	3	3	3	3	-1	-2	-3	-3	-4	-4	-4	-3	3
4	-7	-8	-8	-9	-9	-9	-9	-9	-10	-9	-7	-4	-3	-1	-1	0	-1	-2	-3	-5	-6	-6	-7	-7	-6	0
5	-8	-9	-9	-8	-8	-8	-9	-8	-8	-7	-3	-1	0	1	1	1	1	-1	-2	-3	-3	-3	-3	-3	-4	1
6	-3	-3	-3	-4	-4	-3	-2	-2	-2	-2	0	1	1	1	0	0	1	-1	-2	-2	-3	-4	-4	-4	-2	1
7	-6	-7	-7	-7	-8	-7	-8	-8	-7	-6	-4	-3	-2	-1	0	0	0	-1	-3	-3	-4	-4	-4	-4	-4	0
8	-3	-3	-4	-5	-5	-6	-6	-6	-4	-3	-2	-1	1	1	2	2	1	1	-1	-2	-2	-2	-2	-2	-4	2
9	-2	-1	-1	-1	-1	-2	-2	-2	-2	-1	-1	-1	1	1	1	1	0	-1	-1	-1	-1	-1	-1	-1	-1	1
10	-1	-2	-6	-10	-12	-15	-18	-19	-19	-20	-19	-18	-16	-15	-14	-14	-14	-14	-15	-16	-15	-14	-13	-13	-14	-1
11	-12	-12	-11	-11	-11	-11	-9	-9	-8	-6	-6	-4	-3	-3	-3	-3	-4	-6	-6	-5	-5	-5	-4	-4	-7	-3
12	-4	-5	-4	-4	-4	-5	-6	-6	-4	-2	-1	1	2	2	3	3	3	2	2	1	-2	-2	-2	-2	-2	3
13	-2	-2	-3	-2	-2	-3	-3	-2	-2	1	3	5	6	7	7	7	6	5	3	2	3	2	2	1	3	7
14	3	3	2	3	3	3	3	3	3	4	6	6	7	7	7	8	8	6	4	4	3	4	4	4	5	8
15	3	2	2	2	1	-1	-1	-2	-1	1	3	3	4	6	6	6	6	5	3	3	3	3	2	2	2	6
16	2	3	3	3	3	4	4	1	-1	2	4	6	7	8	8	8	8	7	6	4	4	4	4	4	4	8
17	4	3	3	3	3	4	4	1	4	4	3	4	7	8	8	7	8	6	3	3	2	2	2	1	4	8
18	2	-1	-1	0	-1	-1	-1	1	2	4	5	6	7	7	7	8	7	6	5	6	4	4	4	4	4	8
19	4	4	4	4	4	4	3	3	5	7	9	9	10	(PF)	(PF)	(PF)	9	8	8	7	7	7	7	7	8	10
20	8	8	8	7	7	7	7	4	2	1	-1	-3	-3	-4	-5	-4	-4	-2	-4	-4	-6	-6	-7	-7	0	8
21	-8	-8	-8	-9	-9	-9	-8	-8	-6	-3	-6	-4	-4	-3	-2	-2	-2	-4	-2	-2	-3	-4	-4	-4	-5	-2
22	-5	-5	-7	-7	-6	-6	-7	-8	-8	-7	-6	-1	2	3	4	4	4	4	4	5	4	1	1	0	-1	4
23	0	-1	-1	-1	-1	-2	-1	-1	0	4	6	7	8	11	11	11	11	10	9	8	7	7	6	4	7	11
24	3	3	3	3	3	3	3	3	4	(MT)	(MT)	9	10	11	11	10	9	8	7	6	6	6	6	6	7	10
25	5	6	6	6	6	4	4	4	7	8	8	8	9	9	10	10	9	8	7	6	6	6	6	6	6	6
26	5	6	5	4	6	6	6	5	3	0	1	1	1	2	3	3	1	1	-1	-1	-1	-1	-1	-1	2	6
27	-1	-1	-1	-2	-2	-2	-2	-3	-2	0	1	2	2	3	4	4	4	4	3	2	1	0	0	0	1	4
28	0	0	0	-1	-1	-1	-2	-2	0	3	4	6	6	6	6	6	7	6	5	4	3	2	2	2	3	7

AV	-2	-2	-2	-3	-3	-3	-3	-3	-3	-2	0	1	2	2	2	2	2	2	2	0	-1	-1	-1	-1	-1	-1
PK	8	8	8	7	7	7	7	5	7	8	9	9	10	11	11	11	11	10	9	8	7	7	7	7	8	11
MN	-12	-12	-11	-11	-12	-15	-18	-19	-19	-20	-19	-18	-16	-15	-14	-14	-14	-14	-15	-16	-15	-14	-13	-13	-13	-13

MONTHLY MINIMUM = -20

TEMPERATURE @ 60M  
DEGREE C

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-6	-5	-6	-7	-8	-7	-8	-8	-9	-9	-9	-10	-9	-9	-8	-5
2	-10	-10	-11	-10	-10	-9	-10	-9	-9	-7	-4	-3	-3	-2	-2	-2	-2	-4	-4	-6	-6	-6	-5	-6	-6	-2
3	-6	-7	-6	-6	-6	-6	-6	-7	-6	-4	-1	1	3	3	3	3	2	-1	-2	-2	-3	-4	-4	-5	-3	3
4	-6	-7	-8	-9	-9	-9	-9	-9	-10	-9	-7	-4	-2	-1	-1	0	-1	-2	-3	-5	-6	-6	-7	-7	-6	0
5	-7	-8	-8	-8	-8	-7	-8	-8	-7	-6	-3	-1	1	1	1	1	0	-1	-2	-2	-3	-3	-3	-3	-4	1
6	-3	-3	-3	-3	-3	-2	-2	-2	-2	-2	0	0	1	1	-1	0	1	-1	-2	-2	-3	-4	-4	-4	-2	1
7	-6	-6	-6	-7	-7	-7	-7	-7	-7	-6	-4	-3	-2	-1	0	0	-1	-1	-2	-2	-3	-3	-4	-4	-2	1
8	-3	-3	-4	-4	-4	-5	-5	-5	-4	-3	-2	-1	-1	-1	1	2	1	-1	-2	-2	-1	-1	-2	-3	-4	0
9	-2	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	-1	0	1	1	1	0	-1	-1	-2	-2	-1	-1	-1	-1	2
10	-1	-2	-6	-10	-12	-15	-18	-19	-20	-20	-19	-17	-16	-14	-14	-14	-14	-14	-15	-14	-14	-14	-13	-12	-14	-1
11	-12	-12	-11	-11	-11	-11	-9	-9	-8	-6	-6	-4	-3	-3	-3	-3	-5	-6	-6	-6	-6	-5	-4	-4	-7	-3
12	-4	-4	-4	-4	-4	-5	-5	-6	-4	-2	0	1	2	2	3	3	3	2	1	-1	-1	-1	-2	-1	-1	-1
13	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	3	5	6	7	7	6	6	4	4	2	3	2	2	3	2	7
14	3	3	3	3	3	3	3	3	3	4	6	6	7	7	7	8	7	6	6	4	4	3	4	4	2	8
15	3	2	1	-1	-1	0	0	-2	-1	1	3	3	4	6	6	6	6	7	6	4	4	3	2	2	2	6
16	2	2	2	2	2	1	1	2	1	2	4	6	7	7	8	8	8	5	3	3	3	5	4	4	4	8
17	4	4	4	4	4	4	4	4	4	4	2	4	7	7	7	7	7	6	6	6	6	4	4	4	4	7
18	5	4	4	4	4	4	4	4	5	7	9	9	10	(PF)	(PF)	(PF)	9	8	8	7	7	7	7	8	6	10
19	8	8	8	7	7	7	7	4	2	1	-1	-3	-3	-4	-4	-3	-3	-3	-3	-4	-6	-6	-7	-7	0	8
20	-8	-8	-8	-9	-9	-9	-8	-8	-8	-7	-6	-4	-4	-4	-4	-2	-2	-2	-2	-2	-3	-4	-4	-4	-5	-2
21	-4	-4	-6	-7	-6	-5	-7	-7	-6	-3	-1	-4	-4	-3	-3	-2	-2	-2	-2	-3	-3	-4	-4	-4	-1	4
22	0	0	0	-1	-1	-1	-1	-1	1	4	6	7	8	9	10	11	11	10	9	8	7	6	6	6	7	9
23	4	4	5	5	5	4	4	5	6	(MT)	(MT)	9	9	9	9	9	9	8	7	6	6	6	6	6	7	11
24	6	6	7	6	6	6	4	4	7	7	8	8	9	9	9	9	9	8	7	6	6	6	6	6	7	9
25	6	6	5	5	6	6	6	4	2	0	1	1	1	2	2	0	-1	-1	-1	-1	-1	-1	-1	-1	2	6
26	-1	-1	-1	-2	-2	-2	-2	-3	-2	0	1	1	2	3	3	4	4	4	3	2	2	1	1	0	1	4
27	0	1	1	-1	-1	-1	-2	-1	0	3	4	5	6	6	6	6	6	6	5	4	4	3	2	2	3	6
28	0	1	1	-1	-1	-1	-2	-1	0	3	4	5	6	6	6	6	6	6	5	4	4	3	2	2	3	6
AV	-1	-2	-2	-2	-2	-3	-3	-3	-3	-2	0	1	2	2	2	2	2	1	1	0	-1	-1	-1	-1	0	11
PK	8	8	8	7	7	7	7	5	7	7	9	9	10	10	11	11	11	10	9	8	7	7	7	8	0	
MN	-12	-12	-11	-11	-12	-15	-18	-19	-20	-20	-19	-17	-16	-14	-14	-14	-14	-14	-15	-14	-14	-14	-13	-12	-12	

MONTHLY MINIMUM = -20

TEMPERATURE @10M

C-B TRACT  
MRI AD42  
February 1981

DATA NOT AVAILABLE AT REPORT TIME

TEMPERATURE @10M

C-B TRACT  
MRI AD56  
February 1981

DATA NOT AVAILABLE AT REPORT TIME

DELTA TEMPERATURE 60-10M  
DEGREE C\*100

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	-61	-39	-28	-6	-39	-44	-67	-50	-50	-72	-44	22	39	-22	-72	-78	-67	-61	-22	28	106	106	133	150	-10	150
2	217	167	261	144	183	139	100	117	228	72	-50	-44	-50	-39	-56	-89	-72	-22	56	56	39	144	94	61	69	261
3	194	183	211	244	244	206	172	111	139	-22	-22	-44	-56	-61	-61	-67	-56	-28	28	50	11	0	39	133	65	244
4	94	94	50	33	78	-33	17	6	6	-56	-61	-67	-67	-72	-78	-78	-72	-33	17	0	28	44	28	33	-4	94
5	178	117	61	83	167	183	133	61	161	44	-44	-50	-44	-72	-83	-89	-72	-28	-6	-6	-17	-6	56	83	34	183
6	44	117	100	150	128	72	-11	11	-6	-50	-83	-89	-94	-61	-78	-72	-72	-33	6	44	128	17	67	61	12	150
7	133	106	89	200	122	44	172	178	89	22	-72	-67	-78	-89	-83	-83	-78	-50	56	156	150	122	78	117	51	200
8	100	28	50	111	28	67	72	39	-44	-78	-100	-94	-117	-100	-100	-100	-83	-39	17	50	44	44	28	0	-7	111
9	-6	-28	-33	-44	-61	-67	-67	-67	-78	-89	-94	-89	-94	-89	-100	-100	-89	-78	-72	-61	-44	-39	-44	-56	-66	-6
10	-61	-128	-100	-89	-89	-67	-72	-83	-106	-106	-122	-122	-94	-89	-89	-94	-89	-72	28	128	144	67	106	83	-47	144
11	28	28	44	-11	-33	17	6	-6	-50	-67	-72	-78	-78	-83	-83	-83	-89	-83	-78	-72	-67	-67	-61	-61	-46	44
12	-50	22	-11	6	28	56	78	-17	-44	-61	-56	-67	-72	-67	-67	-72	-67	-39	44	11	61	122	106	122	-2	122
13	78	22	83	100	89	122	167	128	39	-61	-61	-67	-72	-78	-83	-89	-67	-44	-28	39	56	122	156	72	26	167
14	11	-22	44	50	0	28	100	61	-50	-44	-61	-72	-89	-78	-78	-89	-72	-33	0	-6	28	56	6	-17	-14	100
15	-17	-33	-50	-33	0	22	100	33	-50	-72	-67	-83	-78	-67	-72	-72	-72	-39	-22	17	28	94	72	44	-17	100
16	-17	39	28	72	128	89	150	183	33	-67	-72	-89	-83	-89	-83	-83	-83	-44	67	44	106	172	167	156	30	183
17	117	150	67	78	94	72	72	17	-22	-6	-56	-67	-89	-78	-83	-72	-67	-33	-22	6	50	33	33	33	9	150
18	61	106	56	44	72	122	100	261	89	-67	-67	-72	-83	-94	-94	-83	-78	-17	56	72	83	83	28	117	29	261
19	139	56	72	56	17	67	89	133	-17	-72	-83	-89	-94	(PF)	(PF)	(PF)	-67	-44	-44	-33	-6	-6	0	0	3	139
20	-33	-39	-33	-28	-11	-6	-17	-11	-56	-78	-83	-83	-89	-94	-94	-83	-72	-78	-56	-33	-39	-33	-44	-22	-50	-6
21	0	-17	-44	-50	-39	-39	-22	-28	-67	-83	-94	-89	-89	-94	-100	-100	-89	-72	-33	72	122	11	50	78	-34	122
22	28	117	94	50	72	89	156	72	50	-72	-83	-83	-89	-67	-100	-94	-78	-67	6	161	61	94	128	78	18	161
23	50	122	139	144	139	106	67	117	89	-61	-94	-89	-89	-89	-100	-94	-83	-61	6	44	194	56	94	106	30	194
24	94	161	233	150	83	11	106	61	-22	(MT)	(MT)	-100	-106	-100	-106	-94	-83	-44	111	189	72	6	50	17	31	233
25	106	144	189	128	28	133	83	39	-61	-89	-94	-117	-106	-100	-106	-106	-83	-56	33	33	0	39	50	94	8	189
26	67	100	128	61	-33	-39	-44	-44	-61	-50	-33	-22	-39	-28	-78	-139	-94	-50	-22	-28	-39	-39	-44	-50	-26	128
27	-39	-33	-33	-44	-44	-61	6	44	-33	-39	-67	-61	-67	-61	-61	-67	-72	-67	50	111	122	78	44	11	-16	122
28	89	133	56	39	50	33	122	72	-33	-67	-94	-94	-100	-94	-83	-78	-83	-61	17	94	72	28	39	33	4	133

AV	55	60	62	59	50	47	63	51	-1	-51	-72	-74	-77	-75	-84	-87	-77	-49	7	42	53	48	52	53	3	
PK	217	183	261	244	244	206	172	261	228	72	-22	22	39	-22	-56	-67	-56	-17	111	189	194	172	167	156		261
MN	-61	-128	-100	-89	-89	-67	-72	-83	-106	-106	-122	-122	-117	-100	-106	-139	-94	-83	-78	-72	-67	-67	-61	-61		

MONTHLY MINIMUM = -139



RELATIVE HUMIDITY @ 3M  
PERCENT

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	98	98	97	96	93	93	94	94	91	88	82	75	68	83	75	68	57	61	66	77	89	92	95	95	84	98
2	95	95	95	95	95	94	94	94	93	91	80	45	36	35	33	35	45	47	58	61	66	72	73	74	71	95
3	75	75	75	75	75	75	74	73	72	65	50	41	30	21	20	20	22	23	43	56	63	65	69	75	56	95
4	79	82	83	84	87	88	91	92	92	74	61	61	51	43	39	38	38	40	47	61	72	79	84	88	70	92
5	89	90	91	92	94	95	96	96	95	85	64	49	41	34	27	27	28	33	40	48	52	55	55	58	64	96
6	57	61	60	61	63	65	64	62	59	56	50	43	42	40	39	42	41	38	43	48	57	64	66	68	54	68
7	70	74	78	84	89	91	90	84	84	80	70	56	49	43	38	36	36	38	41	52	60	61	61	62	64	91
8	65	64	63	63	63	61	61	63	62	57	50	43	40	37	35	35	33	35	38	43	46	47	48	50	50	65
9	50	51	49	49	50	57	61	74	80	83	80	78	76	70	70	67	67	73	76	80	81	80	77	75	69	83
10	70	69	85	100	95	95	92	92	92	92	91	84	75	64	60	55	51	52	57	64	70	71	63	62	75	100
11	63	62	53	60	59	53	53	49	46	41	31	27	26	25	25	27	33	55	73	74	75	74	71	68	51	75
12	65	66	70	73	73	75	79	82	81	67	50	45	42	41	44	41	41	41	45	58	66	74	78	79	62	82
13	79	78	75	76	79	80	83	82	(MT)	(MT)	37	34	33	29	29	30	30	34	40	49	53	56	58	57	55	83
14	54	46	46	47	46	47	47	49	48	40	37	31	29	27	28	28	28	29	34	40	42	45	49	49	40	54
15	49	53	65	90	93	94	95	95	95	70	53	42	38	35	34	32	34	35	51	66	72	75	67	66	63	95
16	64	62	63	63	69	73	70	74	73	56	41	35	30	31	32	34	35	40	53	65	65	65	65	67	54	74
17	67	67	67	66	66	66	65	65	64	62	64	70	60	55	54	50	55	51	66	78	85	91	92	94	68	94
18	96	96	96	96	93	91	91	91	90	66	38	35	30	28	31	33	35	38	44	49	48	50	56	61	62	96
19	66	69	70	72	74	78	76	76	73	60	46	39	38	36	37	37	36	35	40	45	49	49	47	45	54	78
20	43	41	41	42	43	43	43	41	50	(MT)	89	89	93	96	98	99	98	84	85	92	81	74	74	77	70	99
21	81	86	88	89	93	95	97	97	97	86	72	61	53	53	49	44	41	41	45	59	70	72	75	74	72	97
22	76	75	77	80	83	83	83	85	82	66	51	42	39	37	35	33	33	34	34	47	59	65	69	70	60	85
23	70	69	69	70	70	71	71	72	74	61	39	33	28	26	26	26	26	26	27	37	46	51	51	53	50	74
24	57	59	64	65	64	59	57	57	51	45	31	28	27	25	23	20	18	17	20	25	39	42	46	39	39	65
25	32	33	31	31	32	32	34	35	32	26	23	20	19	19	20	19	19	20	25	35	37	42	46	52	30	52
26	51	55	57	57	56	45	42	42	45	61	98	97	91	85	78	68	86	95	91	75	87	80	81	80	71	98
27	80	77	75	74	74	74	74	74	74	73	57	53	46	45	40	35	32	31	31	50	55	64	69	72	60	80
28	73	78	82	79	78	76	75	77	79	70	50	40	36	34	35	34	34	35	35	41	53	61	66	68	58	82
AV	68	69	70	72	73	73	73	74	73	67	57	50	45	43	41	40	40	42	48	56	62	65	66	67	60	100
PK	98	98	97	100	95	95	97	97	97	92	98	97	93	96	98	99	98	95	91	92	89	92	95	95	95	
MN	32	33	31	31	32	32	34	35	32	26	23	20	19	19	20	19	18	17	20	27	34	36	30	29		

MONTHLY MINIMUM = 17

(03/26/81-RPI)

SOLAR RADIATION  
LANGLEY

CB-TRACT  
TRAILER AR23  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL	PEAK	
1	0	0	0	0	0	0	0	1	2	5	8	11	13	16	11	8	2	0	0	0	0	0	0	0	0	78	16
2	0	0	0	0	0	0	0	1	6	10	11	10	32	44	37	26	10	1	0	0	0	0	0	0	0	188	44
3	0	0	0	0	0	0	0	2	15	29	40	46	47	46	30	21	10	1	0	0	0	0	0	0	0	286	47
4	0	0	0	0	0	0	0	1	10	23	39	46	49	46	38	26	10	1	0	0	0	0	0	0	0	287	49
5	0	0	0	0	0	0	0	5	24	37	43	47	46	40	35	27	8	1	0	0	0	0	0	0	0	313	47
6	0	0	0	0	0	0	0	1	7	14	23	28	31	21	20	22	11	1	0	0	0	0	0	0	0	180	31
7	0	0	0	0	0	0	0	2	12	19	39	47	50	47	39	28	12	1	0	0	0	0	0	0	0	296	50
8	0	0	0	0	0	0	0	1	6	16	38	46	53	41	35	26	11	2	0	0	0	0	0	0	0	277	53
9	0	0	0	0	0	0	0	1	7	16	20	22	25	20	31	19	7	2	0	0	0	0	0	0	0	168	31
10	0	0	0	0	0	0	0	2	4	14	31	46	53	52	42	29	14	1	0	0	0	0	0	0	0	288	53
11	0	0	0	0	0	0	0	2	9	19	22	28	26	23	19	13	4	1	0	0	0	0	0	0	0	166	28
12	0	0	0	0	0	0	0	4	17	32	43	49	42	44	42	28	14	1	0	0	0	0	0	0	0	316	49
13	0	0	0	0	0	0	0	4	18	32	43	50	52	49	42	30	14	1	0	0	0	0	0	0	0	337	52
14	0	0	0	0	0	0	0	2	10	12	15	22	41	20	20	29	13	2	0	0	0	0	0	0	0	187	41
15	0	0	0	0	0	0	0	5	24	34	44	45	44	47	34	18	7	1	0	0	0	0	0	0	0	304	47
16	0	0	0	0	0	0	0	4	19	33	43	50	52	47	38	24	16	2	0	0	0	0	0	0	0	329	52
17	0	0	0	0	0	0	0	1	4	5	10	37	32	22	28	13	17	2	0	0	0	0	0	0	0	170	37
18	0	0	0	0	0	0	0	5	19	30	37	41	42	44	28	19	11	2	0	0	0	0	0	0	0	278	44
19	0	0	0	0	0	0	0	5	20	28	44	38	41	(PF)	(PF)	(PF)	7	1	0	0	0	0	0	0	0	185	44
20	0	0	0	0	0	0	0	3	8	5	5	10	9	9	9	10	10	2	0	0	0	0	0	0	0	81	10
21	0	0	0	0	0	0	0	3	14	18	26	37	46	59	45	34	17	3	0	0	0	0	0	0	0	302	59
22	0	0	0	0	0	0	0	8	22	35	47	53	55	53	45	31	15	3	0	0	0	0	0	0	0	368	55
23	0	0	0	0	0	0	0	5	21	36	47	54	56	53	46	34	18	3	0	0	0	0	0	0	0	373	56
24	0	0	0	0	0	0	0	7	22	(MT)	(MT)	55	57	55	46	35	19	4	0	0	0	0	0	0	0	298	57
25	0	0	0	0	0	0	0	10	25	36	48	52	51	38	44	34	18	4	0	0	0	0	0	0	0	358	52
26	0	0	0	0	0	0	0	2	1	5	10	14	18	43	26	8	8	5	0	0	0	0	0	0	0	141	43
27	0	0	0	0	0	0	0	5	23	37	40	22	21	37	34	27	18	5	0	0	0	0	0	0	0	268	40
28	0	0	0	0	0	0	0	8	23	38	49	57	51	44	38	21	17	3	0	0	0	0	0	0	0	349	57
TL	0	0	0	0	0	0	0	100	392	617	865	1062	1136	1061	902	642	339	53	0	0	0	0	0	0	0	7169	59
PK	0	0	0	0	0	0	0	10	25	38	49	57	57	59	46	35	19	5	0	0	0	0	0	0	0	0	0

BAROMETRIC PRESSURE  
MILLIBARS

CR-TRACT  
TRAILER AB23  
FER 1981  
OCCIDENTAL OIL SHALE INC.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	782	782	782	783	783	783	783	783	784	784	785	785	785	786	786	787	787	787	788	788	788	788	789	789	785	789
2	789	789	790	790	790	790	790	790	791	791	792	792	791	790	790	790	790	790	790	790	790	790	790	790	785	789
3	790	790	790	790	790	790	789	790	790	790	790	789	789	788	787	787	787	787	787	787	787	787	787	787	785	792
4	787	787	786	786	786	786	786	786	786	787	787	787	786	786	785	785	785	785	785	785	785	786	786	786	786	787
5	786	786	786	786	786	786	786	787	787	787	787	787	787	786	786	785	785	785	785	785	785	785	785	785	785	787
6	785	784	784	784	784	784	784	784	784	784	784	784	784	783	783	783	783	783	783	783	783	783	783	783	784	785
7	783	783	783	783	783	783	783	783	783	783	783	782	782	781	781	780	780	780	780	780	780	784	784	784	784	784
8	784	784	784	783	783	783	783	783	783	783	783	782	782	781	781	780	780	780	780	780	780	784	784	784	784	784
9	778	777	777	777	776	776	776	775	775	775	775	774	773	773	772	772	771	772	771	771	771	779	779	778	782	784
10	770	770	771	772	772	773	774	775	777	777	779	780	781	782	783	784	785	785	785	785	785	786	786	786	786	786
11	786	787	787	787	787	787	787	787	787	787	787	788	788	787	787	787	787	788	788	788	788	788	789	789	787	789
12	789	790	790	791	791	791	791	792	793	793	793	794	793	793	793	793	793	793	793	793	793	794	794	794	792	794
13	794	794	794	795	795	795	796	796	796	797	797	797	797	796	796	796	796	796	795	795	795	795	795	795	795	797
14	795	795	795	794	794	794	794	794	793	793	793	793	792	792	791	791	790	790	790	789	789	789	789	789	792	795
15	789	790	790	789	789	789	790	790	790	791	791	791	790	790	789	789	789	789	789	788	788	789	789	788	789	791
16	789	789	789	789	789	789	789	789	790	790	790	790	790	789	788	788	788	788	787	787	787	787	787	787	789	790
17	786	786	786	786	785	785	785	785	786	786	786	786	786	786	786	786	786	787	787	788	788	789	789	789	786	789
18	789	789	789	790	790	790	790	790	791	791	792	792	791	791	791	791	791	791	791	791	791	792	792	792	791	792
19	792	792	792	792	792	792	792	792	792	792	792	792	791	(PF)	(PF)	(PF)	788	787	787	786	786	785	785	784	790	792
20	783	782	782	781	780	780	780	781	783	783	784	784	784	784	784	785	785	785	785	786	786	787	787	787	784	787
21	787	787	787	787	788	788	789	789	790	790	791	791	791	790	790	790	790	790	790	790	791	791	792	792	790	792
22	792	792	792	792	792	792	792	792	792	792	793	792	792	791	791	790	790	790	790	790	790	790	790	790	791	793
23	789	789	789	789	789	789	788	788	788	788	788	788	787	786	786	785	784	784	784	784	783	783	783	782	786	789
24	782	782	782	781	781	781	781	781	781	(MT)	(MT)	786	786	785	785	785	785	785	785	785	785	785	785	785	784	786
25	785	785	785	785	786	786	786	786	787	787	787	787	786	786	785	785	786	786	786	786	786	786	786	786	786	787
26	785	786	785	784	784	784	784	784	785	785	785	784	784	784	784	785	784	781	785	785	785	786	786	786	785	786
27	786	787	787	788	788	788	790	789	790	791	791	791	791	791	790	790	790	790	790	790	790	790	790	790	790	791
28	790	790	790	789	790	789	790	790	791	791	791	791	791	790	790	789	789	789	789	789	789	789	789	789	790	791
AV	787	787	787	787	787	787	787	787	787	788	788	788	788	787	787	787	787	787	787	787	787	787	787	787	787	797
PK	795	795	795	795	795	795	796	796	796	797	797	797	797	796	796	796	796	796	796	795	795	795	795	795	795	797
MN	770	770	771	772	772	773	774	775	775	775	775	774	773	773	772	772	771	772	771	771	771	771	771	771	771	771

MONTHLY MINIMUM = 770

PRECIPITATION  
CM\*100

CB-TRACT  
TRAILER AR20  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL PEAK
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10	8		5			3	3	3																	8
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20													3	5											5
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
TL	8	(	5	(	(	3	3	8	8	(	(	(	3	5	5	(	(	(	(	(	(	(	(	(	46
PK	8		5			3	3	5	8				3	5	5										8



PRECIPITATION  
CM\*100

CB-TRACT  
TRAILER AB23  
FER 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL PEAK
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10		10	3	10		3	3											13							13
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																									
19																									
20													3	5	5										5
21																									
22																									
23																									
24																									
25																									
26																									
27																									
28																									
TL ( )		10	3	10 ( )		3	3	3	5	5	10 ( )		3	5	10	5 ( )		13 ( )							86
PK		10	3	10		3	3	3	5	5	10		3	5	5	5		13							13



EVAPORATION

C-B TRACT  
TRAILER AB23  
February 1981

NOT OPERATIONAL

TRACT  
56  
1981

CB-TRACT  
TRAILER AC20  
FER 1981  
OCCIDENTAL OIL SHALE INC.

INVERSION HEIGHT  
METERS

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK	
1	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(NV)	(NV)	(NV)	(NV)	(NV)	40	110	160	180	210	240	240	210	( )	240	
2	190	210	230	220	200	215	260	270	220	205	150	(NV)	(NV)	(NV)	(NV)	(NV)	100	370	430	495	480	490	500	500	302	500	
3	480	490	460	360	315	350	370	400	420	410	330	290	210	110	(NV)	(NV)	40	215	340	380	310	300	315	325	328	490	
4	305	300	310	305	305	340	305	280	290	280	160	(NV)	(NV)	(NV)	(NV)	(NV)	110	270	395	400	315	300	305	320	294	400	
5	325	305	325	350	330	340	370	370	390	430	330	190	50	(NV)	(NV)	(NV)	(NV)	110	240	300	300	315	305	320	301	430	
6	340	305	300	320	390	400	400	350	300	300	285	200	(NV)	(NV)	(NV)	(NV)	(NV)	70	200	300	330	320	340	315	303	400	
7	400	400	380	370	380	370	370	400	395	400	360	205	(NV)	(NV)	(NV)	(NV)	(NV)	90	290	350	405	430	415	350	356	430	
8	360	350	305	310	340	325	350	315	305	290	150	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	160	350	405	390	400	400	315	323	405	
9	300	315	305	300	310	325	200	40	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	40	190	230	320	315	245	325	
10	300	320	395	400	335	315	320	300	100	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	40	210	340	400	390	350	300	301	400	
11	340	305	330	315	305	340	325	330	370	310	180	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	50	210	305	330	330	300	293	370	
12	490	480	395	400	420	400	400	405	400	260	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	180	320	480	350	395	400	495	423	520
13	460	460	490	490	495	505	540	500	500	485	160	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	90	295	410	430	330	340	260	419	540
14	330	290	320	310	300	315	350	300	190	180	90	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	170	205	220	250	360	300	270	331	530
15	380	370	410	530	460	400	405	395	370	290	180	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	220	510	570	560	600	600	389	600	
16	300	270	290	330	320	340	320	310	300	200	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	90	260	305	405	480	500	440	370	413	550	
17	515	500	540	550	510	430	405	400	400	480	440	230	(NV)	(NV)	(NV)	(NV)	(NV)	230	330	420	500	530	540	525	364	540	
18	320	325	350	360	380	380	380	360	300	210	110	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	50	180	310	480	410	260	290	388	585	
19	480	450	450	500	520	580	585	530	330	190	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	180	300	295	300	300	340	271	340	
20	305	280	270	320	305	260	240	105	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	80	190	305	390	400	390	410	330	420
21	380	370	380	350	380	390	400	420	400	330	260	40	(NV)	(NV)	(NV)	(NV)	(NV)	60	220	400	470	415	430	505	339	505	
22	370	330	350	310	280	300	350	350	380	240	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	80	190	300	370	370	395	390	355	490	
23	480	480	490	400	390	400	420	350	315	220	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	50	190	215	310	390	380	380	318	405	
24	400	400	405	400	400	405	390	305	250	130	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	210	330	380	420	460	460	350	316	460	
25	410	380	300	300	290	230	250	285	215	100	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	110	290	400	450	400	330	380	310	450	
26	350	305	305	320	305	330	290	280	320	330	250	70	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	40	220	340	350	320	340	395	307	450
27	280	280	270	250	305	315	410	450	350	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	50	120	350	400	400	395	305	301	420
28	310	320	325	300	300	310	330	350	305	120	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	420	400	400	395	305	301	420	

AV	367	355	359	358	354	356	361	339	325	278	229	( )	( )	( )	( )	( )	( )	149	272	348	379	383	382	364	330
PK	515	500	540	550	520	580	585	530	500	485	440	290	210	110	( )	( )	110	370	510	570	560	570	600	600	600

STABILITY CLASS @ 50M  
0=STB 1=UNST

CB-TRACT  
TRAILER AC20  
FEB 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								PREV
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	1	1	1	1	1	1	1	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
PV	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0

STABILITY CLASS @ 200M  
0=STR 1=UNST

CB-TRACT  
TRAILER AC20  
FER 1991  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								PREV
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)		1	1	1	1	1	1	1	1	1	0	0	0	0	1
2	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
10	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1
11	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0
20	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1
21	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
PV	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0

STABILITY CLASS USING DT/DZ  
DT 60-10M  
WS 10M

CB-TRACT  
TRAILER AA23  
FEB 1981  
OCCIDENTAL OIL SHALE, INC.

		HOUR (LOCAL STANDARD TIME)																										
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE		
1		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
2		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
3		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
4		E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
5		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
6		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
7		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
8		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
9		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
10		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
11		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
12		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
13		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
14		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
15		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
16		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
17		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
18		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
19		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
20		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
21		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
22		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
23		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
24		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
25		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
26		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
27		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
28		D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	D	
AVE		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	D	

TOTAL OCCURRENCES: A = 2 B = 55 C = 65 D = 210 E = 199 F = 131 HOURS MISSING = 10

(03/27/81-RPI)



NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

NITRIC OXIDE (NO)

C-B SHALE OIL PROJECT

PERIOD( 2/01/81 TO 2/28/81)

CONCENTRATION MAX UG/M*3	WIND DIRECTION																NW	NNW	CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW					
	1	1	1	2	2	2	2	1	1	1	1	0	1	1	2	2	2			
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
LT 10. :	8	2	4	9	61	158	184	24	33	16	20	5	32	22	14	17	37	64		
TOTAL :	8	2	4	9	61	158	184	24	33	16	20	5	32	22	14	17	37	64		
MEAN CONC.	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0		

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

NITRIC OXIDE (NO)

C-B SHALE OIL PROJECT

PERIOD( 2/01/81 TO 2/28/81)

TRAILER AB23

WIND DIRECTION

S SSW SW W WNW NW NNW CALM TOTAL

CONCENTRATION MAX UG/M*3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
3	3	3	2	3	3	2	3	2	2	3	3	2	2	2	3	9	3	

GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	23	12	5	9	27	57	55	28	65	104	135	36	27	17	32	30	5	667
TOTAL :	23	12	5	9	27	57	55	28	65	104	135	36	27	17	32	30	5	667
MEAN CONC.	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0

0 = NO OBSERVATIONS

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

OXIDES OF NITROGEN (NOX)

C-B SHALE OIL PROJECT

PERIOD( 2/01/81 TO 2/28/81)

TRAILER AB20

WIND DIRECTION

CONCENTRATION MAX UG/M*3	WIND DIRECTION										NW					NNW					CALM					TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	NNW	NNW	NNW	NNW	5	5	5	5	5	
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	8	2	4	9	61	158	184	24	33	16	20	5	32	22	14	17	37	37	37	37	37	37	37	37	37	646
TOTAL :	8	2	4	9	61	158	184	24	33	16	20	5	32	22	14	17	37	37	37	37	37	37	37	37	37	646
MEAN CONC.	1	5	3	2	1	2	2	2	3	2	1	0	1	1	3	2	2	2	2	2	2	2	2	2	2	2

0 = NO OBSERVATIONS

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

OXIDES OF NITROGEN (NOX)

C-B SHALE OIL PROJECT

PERIOD( 2/01/81 TO 2/28/81)

TRAILER AB23

WIND DIRECTION

CONCENTRATION MAX UG/M*3	WIND DIRECTION																NW	NNW	CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	W	WSW	NW	NNW	CALM	TOTAL
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	23	12	5	9	27	57	54	28	64	103	134	34	27	16	31	22	5	651		
TOTAL :	23	12	5	9	27	57	55	28	65	104	135	36	27	17	32	30	5	667		
MEAN CONC.	2	2	1	2	0	0	1	0	0	0	0	1	2	3	4	7	3	1		

0 = NO OBSERVATIONS

111348



# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

## NITROGEN DIOXIDE (NO2)

## C-B SHALE OIL PROJECT

PERIOD( 2/01/81 TO 2/28/81)

TRAILER AB20

WIND DIRECTION

CONCENTRATION MAX UG/M**3	WIND DIRECTION												NW				TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 130. :	3	3	3	3	3	5	5	3	3	3	3	0	5	3	5	3	3	
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	8	2	4	9	61	158	184	24	33	16	20	5	32	22	14	17	37	646
TOTAL :	8	2	4	9	61	158	184	24	33	16	20	5	32	22	14	17	37	646
MEAN CONC.	0	3	2	1	0	1	1	1	1	1	0	0	0	0	1	1	1	1

0 = NO OBSERVATIONS



NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

NITROGEN DIOXIDE (NO2)

C-B SHALE OIL PROJECT

TRAILER AB23 PERIOD( 2/01/81 TO 2/28/81)

CONCENTRATION MAX UG/M*3	WIND DIRECTION																TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
GT 130. :	5	1	1	1	3	5	7	1	11	11	11	11	5	11	7	16	3
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	4	9
LT 10. :	23	12	5	9	27	57	55	28	64	103	134	35	27	16	32	26	5
TOTAL :	23	12	5	9	27	57	55	28	65	104	135	36	27	17	32	30	5
MEAN CONC.	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	4	1

0 = NO OBSERVATIONS

03/27/81-RP1

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS.

OZONE (03)

C-B SHALE OIL PROJECT

PERIOD( 2/01/81 TO 2/28/81)

TRAILER AB20

WIND DIRECTION

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
	111	88	90	76	127	113	123	125	125	125	98	90	119	121	123	127	101	

CONCENTRATION

MAX  
UG/M\*3

GT 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
240. - 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220. - 240. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200. - 220. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180. - 200. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160. - 180. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140. - 160. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 140. :	0	0	0	0	1	0	2	1	1	1	0	0	0	1	1	1	0	9
100. - 120. :	1	0	0	0	0	2	1	1	2	2	0	0	2	0	0	0	1	12
80. - 100. :	2	1	1	0	5	12	19	10	17	11	15	2	10	7	1	3	5	121
60. - 80. :	5	1	2	5	46	94	100	12	13	2	4	3	18	13	8	12	13	351
40. - 60. :	0	0	1	4	8	47	61	0	0	0	1	0	2	1	4	1	8	138
20. - 40. :	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	10	15
LT 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL :	8	2	4	9	61	158	184	24	33	16	20	5	32	22	14	17	37	646

MEAN  
CONC.

77	75	65	62	68	66	66	66	83	86	95	86	81	79	77	68	74	57	70
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

0 = NO OBSERVATIONS

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

OZONE (03)

C-B SHALE OIL PROJECT

PERIOD( 2/01/81 TO 2/28/81)

TRAILER AB23

WIND DIRECTION

CONCENTRATION MAX UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
	109	113	101	98	109	101	107	101	111	109	113	103	107	103	103	101	107	

GT 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
240. - 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220. - 240. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200. - 220. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180. - 200. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160. - 180. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140. - 160. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 140. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 120. :	1	4	1	0	1	1	3	1	5	19	32	2	7	4	2	2	1	86
80. - 100. :	19	7	2	8	23	52	47	22	53	83	88	24	10	4	14	18	3	477
60. - 80. :	3	1	2	1	3	4	4	5	7	2	14	10	10	9	16	8	1	100
40. - 60. :	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	0	4
20. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL :	23	12	5	9	27	57	55	28	65	104	135	36	27	17	32	30	5	667
MEAN CONC.	87	97	87	87	87	88	87	87	89	94	93	87	86	83	83	82	87	89

0 = NO OBSERVATIONS

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

CARBON MONOXIDE (CO)

PERIOD( 2/01/81 TO 2/28/81)

TRAILER

AB20

WIND DIRECTION

SSW

SW

W

WNW

NW

NNW

CALM

TOTAL

	N	NNE	NE	ENE	E	ESE	SE	SSE	SSW	SW	W	WNW	NW	NNW	CALM	TOTAL
CONCENTRATION	0	0	0	0	4	8	9	1	0	0	0	0	0	0	0	3

UG/M\*\*3

GT 4000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 1000.	8	2	4	9	61	158	184	24	33	16	20	5	32	22	14	17
TOTAL	8	2	4	9	61	158	184	24	33	16	20	5	32	22	14	17
MEAN CONC.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = NO OBSERVATIONS



C-B SHALE OIL PROJECT

WIND DIRECTION

[illegible]

0 = NO OBSERVATIONS



# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

SULFUR DIOXIDE (SO2)

C-B SHALE OIL PROJECT

PERIOD( 2/01/81 TO 2/28/81)

TRAILER AB20

CONCENTRATION MAX UG/M**3	N	NNE	NE	ENE	E	ESE	SE	WIND DIRECTION				WSW	W	WNW	NW	NNW	CALM	TOTAL
								SSE	S	SSW	SW							
GT 130. :	7	0	7	2	7	10	10	7	7	7	2	0	7	7	7	7	7	
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4
LT 10. :	8	2	4	9	61	156	182	24	33	16	20	5	32	22	14	17	37	642
TOTAL :	8	2	4	9	61	158	184	24	33	16	20	5	32	22	14	17	37	646
MEAN CONC.	1	0	3	0	1	1	1	1	1	2	0	0	0	0	1	2	1	1

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

SULFUR DIOXIDE (SO2)

PERIOD( 2/01/81 TO 2/28/81)

TRAILER AB23

CONCENTRATION MAX UG/M*3	WIND DIRECTION																TOTAL	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		CALM
GT 130. :	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	23	12	5	9	27	57	55	28	64	104	135	36	27	17	32	30	5	666
TOTAL :	23	12	5	9	27	57	55	28	64	104	135	36	27	17	32	30	5	666
MEAN CONC.	2	1	2	2	2	2	2	1	1	1	2	2	2	2	2	2	2	2

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

HYDROGEN SULFIDE (H2S)

PERIOD( 2/01/81 TO 2/28/81)

TRAILER AB23

WIND DIRECTION

CONCENTRATION MAX UG/M\*\*3

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	23	12	5	9	27	57	55	28	65	103	135	35	27	17	32	30	5	665
TOTAL :	23	12	5	9	27	57	55	28	65	103	135	35	27	17	32	30	5	665
MEAN CONC.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = NO OBSERVATIONS

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

C-B SHALE OIL PROJECT

STATION AB20 PERIOD( 2/01/81 TO 2/28/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
8. - 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
5. - 8. :	1	0	0	0	0	5	7	0	0	0	0	0	3	2	0	0	0 :	18
3. - 5. :	1	0	0	0	0	6	70	6	9	5	5	1	14	8	2	1	0 :	128
1. - 3. :	5	0	1	4	40	105	91	17	17	10	12	2	10	11	6	9	2 :	342
LT 1. :	1	2	3	5	21	42	16	1	7	1	3	2	5	1	6	7	2 :	125
TOTAL :	8	2	4	9	61	158	184	24	33	16	20	5	32	22	14	17	4	613
PERCENT	1.	0.	1.	1.	10.	26.	30.	4.	5.	3.	3.	1.	5.	4.	2.	3.	1.	100.

0 = NO OBSERVATIONS

11-358



# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

C-B SHALE OIL PROJECT

STATION AA23 PERIOD( 2/01/81 TO 2/28/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	
GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
8. - 11. :	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0 :	2
5. - 8. :	0	0	0	0	0	0	0	0	12	14	21	2	2	2	0	1	0 :	54
3. - 5. :	1	0	0	0	0	1	1	7	12	44	46	4	3	6	5	6	0 :	136
1. - 3. :	16	5	1	0	12	41	33	10	27	26	38	18	11	5	13	17	0 :	273
LT 1. :	6	7	4	9	15	15	21	11	14	18	30	12	11	4	14	6	0 :	197
TOTAL :	23	12	5	9	27	57	55	28	65	104	135	36	27	17	32	30	0	662
PERCENT	3.	2.	1.	1.	4.	9.	8.	4.	10.	16.	20.	5.	4.	3.	5.	5.	0.	100.

0 = NO OBSERVATIONS



# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

30 METER LEVEL

C-B SHALE OIL PROJECT

STATION AA23 PERIOD( 2/01/81 TO 2/28/81)

## WIND DIRECTION

WIND SPEED MAX METERS/SEC	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
GT 11. :	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8. - 11. :	0	0	0	0	0	29	14	3	1	0	0	0	0	0	0	1	0	48
5. - 8. :	1	0	0	0	2	47	40	1	2	0	0	0	1	2	1	1	0	98
3. - 5. :	4	0	0	0	7	69	26	1	0	3	1	0	7	8	5	8	0	139
1. - 3. :	10	7	3	6	48	87	31	5	2	0	4	7	11	6	9	19	0	255
LT 1. :	5	1	7	11	16	26	20	2	3	1	2	3	3	0	5	5	0	110
TOTAL :	20	8	10	17	73	259	131	12	8	4	7	10	22	16	20	34	0	651
PERCENT	3.	1.	2.	3.	11.	40.	20.	2.	1.	1.	1.	2.	3.	2.	3.	5.	0.	100.

0 = NO OBSERVATIONS

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

60 METER LEVEL

C-B SHALE OIL PROJECT

STATION AA23 PERIOD( 2/01/81 TO 2/28/81)

## WIND DIRECTION

WIND SPEED MAX METERS/SEC	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
GT 11. :	0	0	2	6	0	0	0	1	0	0	0	0	0	0	0	0	0 :	9
8. - 11. :	0	0	4	16	20	2	2	1	0	0	0	0	0	0	0	0	0 :	45
5. - 8. :	2	5	9	28	49	10	1	2	2	4	2	0	0	0	0	0	0 :	114
3. - 5. :	5	16	12	37	40	12	8	13	10	12	9	3	0	0	0	0	3 :	180
1. - 3. :	18	19	28	33	21	11	14	16	8	18	15	5	7	3	3	7	28 :	254
LT 1. :	4	3	4	6	4	3	3	5	2	1	3	1	4	0	4	3	11 :	61
TOTAL :	29	43	59	126	134	38	28	38	22	35	29	9	11	3	7	10	42	663
PERCENT	4.	6.	9.	19.	20.	6.	4.	6.	3.	5.	4.	1.	2.	0.	1.	2.	6.	100.

0 = NO OBSERVATIONS

C-B SHALE OIL PROJECT

FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

STATION AD42 PERIOD (02/01/81 - 02/28/81)

DATA NOT AVAILABLE AT REPORT TIME

FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

C-B SHALE OIL PROJECT

STATION AD56 PERIOD (02/01/81 to 02/28/81)

DATA NOT AVAILABLE AT REPORT TIME

FIVE MAXIMUM SLIDING AVERAGE  
UG/M\*\*3

C-8 TRACT  
SITE AB20  
FEB 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR (BEG)	VALUE
S02	3 HR	1	19	3	9.6
		2	17	23	8.7
		3	18	15	8.7
		4	17	14	7.9
		5	17	17	7.9
S02	24 HR	1	18	6	8.2
		2	17	6	5.3
		3	19	6	3.3
		4	1	1	2.6
		5	24	13	2.6
C0	1 HR	1	26	19	0.0
		2	26	18	0.0
		3	26	20	0.0
		4	17	13	0.0
		5	26	17	0.0
C0	8 HR	1	26	13	0.0
		2	17	6	0.0
		3	27	13	0.0
		4	25	17	0.0
		5	13	15	0.0
03	1 HR	1	18	12	127.5
		2	18	13	127.5
		3	18	14	125.6
		4	18	15	125.6
		5	18	16	125.6
PART	24 HR	1	25	1	15.1
		2	7	1	8.5
		3	19	1	7.3
		4	22	1	7.1
		5	13	1	6.8



FIVE MAXIMUM SLIDING AVERAGE  
UG/H#3

C-B TRACT  
SITE AB23  
FEB 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR(BEG)	VALUE
S02	3 HR	1	1	1	2.6
		2	1	4	2.6
		3	1	7	2.6
		4	1	10	2.6
		5	1	13	2.6
S02	24 HR	1	1	1	2.6
		2	2	1	2.6
		3	3	1	2.6
		4	4	1	2.6
		5	5	1	2.6
CO	1 HR	1	27	15	100.0
		2	1	1	100.0
		3	1	2	100.0
		4	1	3	100.0
		5	1	4	100.0
CO	8 HR	1	1	1	100.0
		2	1	9	100.0
		3	1	17	100.0
		4	2	1	100.0
		5	2	9	100.0
O3	1 HR	1	5	13	113.8
		2	28	12	113.8
		3	27	17	111.8
		4	28	11	111.8
		5	28	13	111.8
PART	24 HR	1	16	1	16.7
		2	7	1	12.4
		3	28	1	10.4
		4	10	1	8.5
		5	25	1	6.0

ERROR IN FILE SEARCH NR

FIVE MAXIMUM SLIDING AVERAGE  
UG/M\*\*3

C-B TRACT  
SITE AD56  
FEB 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR (BEG)	VALUE
PART	24 HR				
		1	25	1	16.3
		2	16	1	7.8
		3	22	1	4.7
		4	19	1	4.5
		5	28	1	3.8

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB20  
FEBRUARY 1981  
OCCIDENTAL OIL SHALE, INC.

	NO	NO <sub>x</sub>	NO <sub>2</sub>	O <sub>3</sub>	CO	SO <sub>2</sub>
MULTIPOINT RECORDER *	38	38	38	38	38	38
DATA ACQUISITION SYSTEM	62	62	62	58	62	62
OTHER SYSTEMS						
EFFICIENCY	100	100	100	96	100	100

\* Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB20  
FEBRUARY 1981  
OCCIDENTAL OIL SHALE, INC.

	WS	WD	SIGMA HWD 10m	TEMP	INVERS. HT	STB 50m	STB 200m	PART	PRECIP.
MULTIPOINT RECORDER *	38	38							
DATA ACQUISITION SYSTEM	58	58	60						
OTHER SYSTEMS					100	100	100	100	100
EFFICIENCY	96	96	60	0	100	100	100	100	100

\* Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB23  
FEBRUARY 1981  
OCCIDENTAL OIL SHALE, INC.

NO	NO <sub>x</sub>	NO <sub>2</sub>	O <sub>3</sub>	SO <sub>2</sub>	H <sub>2</sub> S	CO	BAR PRESS.	SOLAR RAD.
----	-----------------	-----------------	----------------	-----------------	------------------	----	---------------	---------------

MULTIPOINT  
RECORDER \*

DATA AQUISITION  
SYSTEM

99	99	99	99	99	99	99	99	99
----	----	----	----	----	----	----	----	----

OTHER SYSTEMS

EFFICIENCY

99	99	99	99	99	99	99	99	99
----	----	----	----	----	----	----	----	----

\* Serves as Back-up to Data Aquisition System



SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB23  
FEBRUARY 1981  
OCCIDENTAL OIL SHALE, INC.

	TMP 10m	TMP 30m	TMP 60m	DT 60-10m	RH	PART	PREC
--	------------	------------	------------	--------------	----	------	------

MULTIPOINT  
RECORDER \*

DATA ACQUISITION  
SYSTEM

	99	99	99	99			
--	----	----	----	----	--	--	--

OTHER SYSTEMS

					99	100	100
--	--	--	--	--	----	-----	-----

EFFICIENCY

	99	99	99	99	99	100	100
--	----	----	----	----	----	-----	-----

\* Serves as Back-up to Data Acquisition System

C-bTRACT  
TRAILER AB23  
FEBRUARY 1981  
OCCIDENTAL OIL SHALE, INC.

SOURCE OF DATA REPORTED  
PERCENT

SIGMA HWD 10m	SIGMA HWD 30m	SIGMA HWD 60m	WS 10m	WS 30m	WS 60m	WD 10m	WD 30m	WD 60m
------------------	------------------	------------------	-----------	-----------	-----------	-----------	-----------	-----------

MULTIPOINT  
RECORDER \*

83 83

DATA ACQUISITION  
SYSTEM

99 99 16 99 99 16 99 99 16

OTHER SYSTEMS

EFFICIENCY

99 99 16 99 99 99 99 99 99

\*Serves as Back-up to Data Acquisition System

C-b TRACT  
 SITE AD42  
 FEBRUARY 1981  
 OCCIDENTAL OIL SHALE, INC.

SOURCE OF DATA REPORTED  
 PERCENT

WS 10m  
 WD 10m  
 TMP 10m

OTHER SYSTEMS

EFFICIENCY

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
SITE AD56  
FEBRUARY 1981  
OCCIDENTAL OIL SHALE, INC.

WS  
10m

WD  
10m

TMP  
10m

PART

OTHER SYSTEMS

100

EFFICIENCY

100

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AIR MONITORING REPORT  
FOR  
PROTOTYPE OIL SHALE LEASE TRACT C-B

MARCH 1981

SUBMITTED  
MAY 12, 1981



PREPARED BY :  
OCCIDENTAL OIL SHALE, INC. OPERATOR  
P.O. BOX 2687  
GRAND JUNCTION, COLORADO 81501

## LIST OF TABLES

### SECTION I - AIR QUALITY & METEOROLOGICAL DATA

	<u>Page</u>
DIURNAL VARIATION OF GASEOUS AND PARTICULATE MATTER	
Nitric Oxide (NO) at Station AB20 . . . . .	II-380
Nitric Oxide (NO) at Station AB23 . . . . .	II-381
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB20 . . . . .	II-382
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB23 . . . . .	II-383
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB20 . . . . .	II-384
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB23 . . . . .	II-385
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-386
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-387
Carbon Monoxide (CO) at Station AB20 . . . . .	II-388
Carbon Monoxide (CO) at Station AB23 . . . . .	II-389
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 . . . . .	II-390
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 . . . . .	II-391
Hydrogen Sulfide (H <sub>2</sub> S) at Station AB23 . . . . .	II-392
Particulates Daily Average at Stations AB20, AB23, AD56 . . .	II-393
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS	
Wind Speed at Station AB20 . . . . .	II-394
Wind Speed at Station AA23 - 10 Meter Level . . . . .	II-395
Wind Speed at Station AA23 - 30 Meter Level . . . . .	II-396
Wind Speed at Station AA23 - 60 Meter Level . . . . .	II-397
Wind Speed at Station AD42 . . . . .	II-398
Wind Speed at Station AD56 . . . . .	II-399
Wind Direction at Station AB20 . . . . .	II-400
Wind Direction at Station AA23 - 10 Meter Level . . . . .	II-401
Wind Direction at Station AA23 - 30 Meter Level . . . . .	II-402
Wind Direction at Station AA23 - 60 Meter Level . . . . .	II-403
Wind Direction at Station AD42 . . . . .	II-404
Wind Direction at Station AD56 . . . . .	II-405

# LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS (Contd)	
Wind Direction and Vector Average at Station AB20 . . . . .	II-406
Wind Direction and Vector Average at Station AA23 -	
10 Meter Level . . . . .	II-407
Wind Direction and Vector Average at Station AA23 -	
30 Meter Level . . . . .	II-408
Wind Direction and Vector Average at Station AA23 -	
60 Meter Level . . . . .	II-409
Sigma Horizontal Wind Direction at Station AB20 -	
10 Meter Level . . . . .	II-410
Sigma Horizontal Wind Direction at Station AA23 -	
10 Meter Level . . . . .	II-411
Sigma Horizontal Wind Direction at Station AA23 -	
30 Meter Level . . . . .	II-412
Sigma Horizontal Wind Direction at Station AA23 -	
60 Meter Level . . . . .	II-413
Ambient Air Temperature at Station AB20 . . . . .	II-414
Ambient Air Temperature at Station AA23 -	
10 Meter Level . . . . .	II-415
Ambient Air Temperature at Station AA23 -	
30 Meter Level . . . . .	II-416
Ambient Air Temperature at Station AA23 -	
60 Meter Level . . . . .	II-417
Ambient Air Temperature at Station AD42 . . . . .	II-418
Ambient Air Temperature at Station AD56 . . . . .	II-419
Delta Temperature (60m - 10m) at Station AA23 . . . . .	II-420
Relative Humidity at Station AB23 - 3 Meter Level . . . . .	II-421
Solar Radiation at Station AB23 . . . . .	II-422
Barometric Pressure at Station AB23 . . . . .	II-423
Precipitation at Station AB20 . . . . .	II-424
Precipitation at Station AB23 . . . . .	II-425
Evaporation at Station AB23 . . . . .	II-426



# LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS (Contd)	
Inversion Height at Station AC20 . . . . .	II-427
Stability Class at Station AC20 - 50 Meter Level . . . . .	II-428
Stability Class at Station AC20 - 200 Meter Level . . . . .	II-429
Pasquill-Gifford Stability Class using DT/DZ - (60m - 10m) at Station AA23 . . . . .	II-430
MONTHLY SUMMARY REPORT: NO. OF 1 - HOUR SAMPLES OF GASEOUS PARAMETERS BY CONCENTRATION AND BY WIND DIRECTION, 10 METER LEVEL	
Nitric Oxide (NO) at Station AB20 . . . . .	II-431
Nitric Oxide (NO) at Station AB23 . . . . .	II-432
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB20 . . . . .	II-433
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB23 . . . . .	II-434
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB20 . . . . .	II-435
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB23 . . . . .	II-436
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-437
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-438
Carbon Monoxide (CO) at Station AB20 . . . . .	II-439
Carbon Monoxide (CO) at Station AB23 . . . . .	II-440
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 . . . . .	II-441
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 . . . . .	II-442
Hydrogen Sulfide (H <sub>2</sub> S) at Station AB23 . . . . .	II-443
MONTHLY SUMMARY REPORT: FREQUENCY TABLE OF WIND SPEED BY DIRECTION	
Station AB20 . . . . .	II-444
Station AA23 - 10 Meter Level . . . . .	II-445
Station AA23 - 30 Meter Level . . . . .	II-446
Station AA23 - 60 Meter Level . . . . .	II-447
Station AD42 . . . . .	II-448
Station AD56 . . . . .	II-449
MONTHLY SUMMARY REPORT: FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES	
Particulate at Station AB20 . . . . .	II-450
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-451

LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
MONTHLY SUMMARY REPORT: FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES (Contd)	
Carbon Monoxide (CO) at Station AB20 - 1 Hour . . . . .	II-450
Carbon Monoxide (CO) at Station AB20 - 8 Hour . . . . .	II-450
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 - 3 Hour . . . . .	II-450
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 - 24 Hour . . . . .	II-450
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 - 3 Hour . . . . .	II-451
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 - 24 Hour . . . . .	II-451
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-451
Particulate at Station AB23 . . . . .	II-451
Carbon Monoxide (CO) at Station AB23 - 1 Hour . . . . .	II-451
Carbon Monoxide (CO) at Station AB23 - 8 Hour . . . . .	II-451
Particulate at Station AD56 . . . . .	II-452
MONTHLY SUMMARY REPORT: INSTRUMENT EFFICIENCY	
Station AB20 . . . . .	II-453
Station AB23 . . . . .	II-455
Station AD42 . . . . .	II-458
Station AD56 . . . . .	II-459

NITRIC OXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
7	1	1	2	1	1	2	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2
8	2	1	2	1	2	1	1	2	2	4	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2
9	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
10	2	2	2	2	2	2	2	5	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
11	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(IM)	(IM)	(IM)	(IM)	(IM)	(MT)	(MT)	1	1	2	2	2	2	2
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	2	2	2	2	2	2	2	2	2
13	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
14	2	2	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
16	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
17	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
18	2	1	2	2	1	1	1	2	2	(PF)	1	1	1	(PF)	(PF)	1	1	1	1	1	1	1	1	1	1	2
19	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	2
20	2	2	2	2	2	2	2	2	1	1	2	1	1	(MT)	(MT)	1	1	1	1	1	1	1	1	1	1	2
21	2	1	2	1	1	1	1	2	2	2	2	2	1	2	2	2	2	1	1	1	1	1	1	1	1	2
22	2	2	2	1	1	1	1	2	2	2	2	1	2	2	2	1	1	1	1	1	1	1	1	1	1	2
23	2	2	2	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
24	2	2	2	2	2	2	2	2	2	2	(PF)	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2
25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
26	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
27	1	1	1	1	1	(PF)	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	2
28	2	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2
29	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	1
30	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
31	2	1	1	1	1	1	2	2	2	2	2	2	1	1	1	2	2	2	2	1	1	1	1	1	1	2
AV	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	5
PK	2	2	2	2	2	2	2	5	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

NITRIC OXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								24	AVE	PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23				
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
2	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
3	0	0	2	2	4	4	11	11	6	6	(IM)	(IM)	(IM)	(IM)	(IM)	1	0	0	0	0	0	0	0	0	0		
4	1	1	1	1	1	1	1	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
5	1	2	1	1	1	1	1	1	1	1	4	9	6	12	4	11	7	2	0	0	0	0	0	0	2		
6	0	1	1	2	2	2	2	2	5	5	10	5	7	5	5	5	7	6	6	1	1	1	1	1	12		
7	1	2	1	2	4	1	1	1	2	2	15	10	6	4	4	4	4	4	2	0	0	0	0	0	15		
8	2	1	1	2	1	1	1	1	4	4	2	4	1	1	1	1	1	1	0	0	0	0	0	0	4		
9	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9		
10	1	1	1	2	2	2	2	2	2	2	4	4	1	1	1	1	1	1	0	0	0	0	0	0	1		
11	1	1	1	2	2	2	2	2	2	2	4	4	2	2	2	2	2	2	0	0	0	0	0	0	4		
12	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
13	1	1	2	2	2	2	2	2	4	4	2	2	2	2	2	2	2	2	0	0	0	0	0	0	12		
14	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	4		
15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	15		
16	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	4		
17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	9		
18	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	1		
19	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	1		
20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	12		
21	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	4		
22	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	2		
23	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	2		
24	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	3		
25	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	2		
26	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	2		
27	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	2		
28	0	1	4	4	4	4	4	4	5	9	11	12	9	4	2	6	6	11	5	7	2	2	4	4	2		
29	4	1	1	1	1	1	1	1	1	5	4	2	2	1	1	1	1	0	0	0	0	1	1	1	2		
30	1	1	1	1	1	2	1	1	1	4	4	2	2	1	4	1	1	0	0	0	0	2	2	2	2		
31	4	4	4	4	4	4	4	4	2	2	2	2	2	1	1	0	0	2	2	0	1	1	1	1	2		
AV	2	2	2	2	2	2	2	3	3	3	3	3	2	2	1	2	1	2	1	1	1	1	1	1	2		
PK	4	12	4	4	5	5	11	11	7	9	15	12	11	12	5	11	6	11	6	7	2	2	4	4	15		



OXIDES OF NITROGEN  
(UG/M3)

CB-TRACT  
TRAILER AB20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	6	6	4	4	4	4	4	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	6
2	6	4	4	4	4	4	4	8	4	6	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	8
3	4	4	4	4	4	4	4	6	4	6	8	4	6	4	4	4	4	4	4	4	4	4	4	4	4	8
4	4	4	4	4	4	4	4	6	4	6	6	6	4	4	4	4	6	4	4	6	6	4	4	6	4	6
5	6	4	4	4	4	4	4	6	6	4	4	4	4	4	4	4	4	6	4	6	6	4	4	4	4	6
6	8	6	4	4	6	6	6	11	9	8	6	8	4	4	4	4	8	6	6	4	6	6	4	4	6	11
7	4	6	4	4	4	4	4	9	6	8	6	6	4	6	6	6	6	6	6	8	6	6	6	8	5	8
8	8	6	6	6	6	6	6	9	6	9	6	8	4	6	4	4	4	4	6	6	6	6	6	6	5	9
9	6	4	4	4	6	6	6	6	6	6	6	6	6	4	4	4	4	6	6	6	6	6	6	6	5	6
10	8	6	6	6	6	6	6	11	9	8	6	6	6	6	6	8	9	(MT)	6	6	6	6	6	6	7	11
11	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	8	8	8	6	6	6	6	6	6	8	8	6	6	7	9
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	4	4	4	4	4	4	6	6	6	6	6	6
13	8	6	4	4	4	4	4	6	6	8	6	6	6	4	4	4	4	4	4	6	6	6	6	6	6	6
14	8	6	4	4	4	4	6	8	6	11	6	6	4	4	4	4	4	4	4	4	6	6	6	6	5	9
15	8	6	6	4	4	4	4	6	6	6	6	6	6	6	6	6	4	4	4	6	6	6	6	6	5	8
16	6	6	4	4	6	6	6	6	8	8	6	6	6	6	6	6	6	6	6	4	4	6	4	4	5	8
17	4	4	4	4	4	4	4	6	(PF)	(PF)	4	4	4	4	4	4	4	4	4	4	6	6	4	4	4	6
18	6	6	6	6	4	4	6	11	9	6	6	6	4	(PF)	(PF)	4	4	4	4	6	6	6	6	6	4	4
19	6	8	6	8	8	8	8	9	11	6	6	6	4	4	6	6	4	6	8	6	6	4	6	6	6	11
20	8	6	6	4	4	6	6	11	6	8	9	6	6	(MT)	(MT)	2	6	4	4	6	6	6	6	6	6	11
21	6	6	6	6	6	6	6	6	6	6	6	4	6	4	9	13	9	6	6	6	6	6	6	6	6	13
22	6	6	4	4	4	4	6	6	6	6	4	4	6	4	4	6	4	6	8	6	6	6	6	4	5	9
23	6	6	6	6	6	6	6	9	6	6	4	4	6	4	4	6	6	6	6	6	6	6	4	4	5	9
24	8	6	6	6	6	6	6	8	8	6	6	6	6	6	6	6	6	6	6	6	6	6	4	4	6	8
25	6	4	4	4	4	4	6	6	4	6	6	6	6	6	4	6	6	6	6	6	4	4	4	6	5	6
26	6	6	4	9	4	2	4	6	6	4	4	4	4	4	4	4	2	4	4	4	4	4	4	4	4	6
27	4	4	6	2	4	(PF)	2	2	2	4	4	4	2	6	4	4	4	4	4	4	4	4	4	4	4	6
28	6	6	4	4	4	4	4	4	4	8	2	4	4	2	2	2	2	2	2	4	2	2	4	4	3	8
29	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
30	4	4	2	4	4	4	2	2	4	4	2	4	2	4	2	4	4	8	4	8	2	2	2	4	3	8
31	6	4	2	2	2	2	4	6	6	8	4	4	2	2	2	4	4	6	2	2	2	4	4	4	3	8
AV	6	5	4	4	4	4	5	7	6	6	5	5	5	4	4	5	5	5	5	5	5	5	5	5	5	5
PK	8	8	6	9	8	8	8	11	11	11	9	8	8	8	9	13	9	9	8	8	8	8	6	9	9	13



OXIDES OF NITROGEN  
(UG/M3)

CB-TRACT  
TRAILER AB23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	4	4	9	2	6	9	11	4	2	0	0	0	0	0	4	2	0	0	0	0	0	0	0	2	11
2	2	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3	0	0	0	2	0	0	0	0	0	2	8	2	0	0	2	4	0	0	0	0	0	0	0	0	0	0
4	0	8	9	11	13	15	39	38	21	21	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	26	2	0	0	0	0	0	11	39
5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6	0	9	4	0	2	2	0	6	6	9	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7	0	0	2	0	2	2	0	2	0	9	9	23	19	34	9	34	11	9	0	0	0	2	2	2	7	34
8	4	4	2	11	9	11	2	8	11	2	2	9	17	9	11	19	17	6	0	0	0	2	2	2	7	34
9	4	0	6	11	2	19	23	11	9	2	38	26	15	8	0	0	8	4	17	0	0	0	0	0	8	38
10	9	2	0	11	2	4	2	6	4	8	4	2	2	0	0	0	8	0	0	0	0	0	0	0	3	38
11	2	6	9	17	4	0	2	6	8	2	8	8	2	28	11	11	0	30	0	0	0	0	0	0	6	30
12	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	13	0	0	0	0	0	0	0	1	13
13	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
14	2	38	4	2	2	21	6	4	8	17	9	4	8	4	2	4	2	32	4	2	2	2	2	2	7	38
15	2	4	2	4	4	4	6	13	6	4	8	9	8	4	6	2	4	2	2	2	2	2	4	2	4	13
16	2	2	4	4	6	8	4	4	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6
17	0	2	0	4	4	4	6	6	4	0	6	6	8	11	12	0	4	0	0	0	4	8	2	4	4	11
18	2	4	4	4	4	6	4	6	17	13	9	6	4	0	0	0	4	0	0	0	0	2	2	4	4	17
19	4	4	4	4	4	4	4	4	4	4	2	0	0	0	0	0	0	0	0	0	0	2	2	2	4	6
20	2	2	2	4	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2	1	4
21	2	2	6	6	17	4	4	6	6	4	13	15	15	13	4	4	6	8	6	6	6	6	6	6	6	15
22	6	8	6	6	4	6	6	6	6	4	4	6	6	8	4	2	4	2	2	2	2	4	4	4	5	17
23	4	4	4	6	4	8	8	4	6	4	8	6	6	4	2	2	2	2	2	2	2	2	2	4	4	8
24	8	19	4	6	4	4	6	4	4	17	28	26	30	4	6	8	2	11	4	4	2	2	4	4	8	30
25	4	4	6	6	6	4	4	4	4	2	2	0	0	0	0	0	0	0	0	0	0	2	4	4	2	6
26	2	4	2	2	2	2	4	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6
27	0	2	0	2	0	2	4	2	0	2	0	0	0	0	0	0	0	0	0	0	0	6	4	4	1	6
28	4	6	11	6	6	6	6	6	8	21	26	28	23	8	4	17	15	38	15	23	4	4	4	4	12	38
29	6	6	6	6	6	6	8	6	8	6	4	4	2	0	0	0	0	0	0	0	0	4	0	0	3	8
30	2	0	0	0	0	4	2	0	0	15	11	2	0	2	6	4	2	2	2	4	4	6	4	4	3	15
31	6	6	6	4	4	4	6	4	4	4	2	2	0	0	0	0	0	0	0	0	0	0	2	2	2	6
AV	2	5	3	4	4	5	5	5	5	6	7	6	5	5	3	4	3	6	2	1	1	1	2	2	4	39
PK	9	38	11	17	17	21	39	38	21	21	38	28	30	34	11	34	17	38	17	23	6	8	11	6		

NITROGEN DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AR20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	2	4	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
2	4	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
3	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
4	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
5	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
6	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
7	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
8	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
9	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
10	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
11	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
12	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
13	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
14	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
15	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
16	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
17	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
18	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
19	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
20	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
21	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
22	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
23	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
24	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
25	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
26	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
27	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
28	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
29	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
30	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
31	2	2	2	2	2	2	2	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4
AV	3	2	1	2	2	2	2	4	3	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2
PK	6	6	4	4	6	6	6	8	9	6	6	6	4	4	6	9	6	4	6	4	4	4	4	3	2	9

NITROGEN DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	4	4	9	2	6	9	9	4	2	0	0	0	0	0	4	2	0	0	0	0	0	0	0	2	9
2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3	0	0	0	2	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0
4	0	6	6	8	8	9	23	21	11	11	8	2	0	0	0	2	0	17	0	0	0	0	0	0	0	8
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
6	0	6	2	0	0	0	0	2	0	6	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	4	4	9	9	15	4	17	6	6	0	0	0	0	0	0	0	0
8	2	2	0	8	6	15	19	4	6	0	0	2	6	2	4	8	8	2	0	0	0	0	0	0	0	17
9	0	0	2	0	0	0	0	0	2	0	15	11	6	2	4	8	2	4	8	0	0	0	0	0	0	3
10	6	0	0	8	6	2	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	9
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	8	13	2	0	0	2	2	0	2	2	0	15	6	8	0	19	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	8	0	0	0	0	0	0	0	0	8
15	0	19	0	0	0	13	2	0	2	0	6	4	4	2	2	2	0	19	2	0	0	0	0	0	0	0
16	0	0	0	0	2	0	0	0	0	0	4	0	0	0	0	0	2	0	0	0	0	0	0	0	0	19
17	0	0	0	0	0	4	0	0	0	0	0	0	0	4	6	0	0	0	0	0	0	0	0	0	0	6
18	0	0	0	0	0	0	0	0	6	6	4	2	0	0	0	0	2	0	0	0	0	0	0	0	0	2
19	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
21	0	0	0	0	0	0	0	0	0	0	6	6	6	6	0	0	0	4	0	0	0	0	0	0	0	0
22	2	4	2	2	9	2	0	0	2	0	0	0	2	2	0	0	2	0	2	2	2	2	2	2	2	1
23	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
24	2	9	0	2	0	0	2	0	0	9	15	11	13	0	2	4	0	8	2	0	0	0	0	0	0	15
25	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
26	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
27	0	0	0	2	0	0	0	0	0	8	9	9	9	2	0	8	0	21	8	0	0	0	0	0	0	21
28	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	11	0	0	0	0	0	2
29	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
30	0	0	0	0	0	0	0	0	0	8	6	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	2	1	2	1	2	2	2	1	2	3	2	2	2	1	2	1	1	3	1	1	0	0	1	0	1
PK	6	19	8	13	9	15	23	21	11	11	15	11	13	15	6	17	8	21	8	11	2	4	6	0	4	23

OZONE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	45	45	47	47	47	45	49	49	59	76	88	88	86	84	86	84	82	78	76	61	53	53	51	49	64	88
2	43	41	43	43	47	45	41	41	49	63	76	76	76	76	82	74	73	67	67	65	59	57	51	55	59	82
3	51	53	49	43	47	43	41	47	55	57	61	76	80	80	78	74	73	67	67	65	59	57	51	84	70	84
4	74	73	71	71	73	71	71	71	73	74	76	80	82	82	82	84	84	80	63	49	51	47	49	45	70	84
5	43	47	51	51	49	49	49	51	59	76	84	84	82	82	82	74	80	73	59	49	47	47	47	49	61	84
6	47	41	45	41	35	31	29	31	39	51	71	67	71	82	82	82	80	84	88	88	78	78	78	74	62	88
7	74	73	74	73	71	69	69	69	73	67	76	73	73	73	74	73	71	71	59	55	49	45	49	37	66	76
8	53	59	59	57	53	53	55	55	63	67	73	82	84	88	88	88	86	78	65	49	47	53	53	55	65	88
9	71	69	63	55	51	51	55	59	65	73	80	84	86	86	90	100	118	112	96	92	88	84	82	78	79	118
10	78	80	78	74	73	63	59	55	69	84	100	106	108	114	98	98	96	(MT)	(MT)	92	84	78	78	78	84	114
11	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	86	78	74	78	88	112	112	96	84	82	80	84	80	87	112
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	104	122	116	100	78	69	59	53	51	51	( )	122
13	47	51	53	53	55	53	53	74	84	92	94	86	90	88	90	86	90	88	78	65	57	55	51	47	70	94
14	47	47	49	47	47	45	41	41	57	71	74	84	88	86	86	86	88	80	69	55	49	49	49	49	62	88
15	49	47	47	47	47	47	45	49	59	80	92	94	96	94	94	92	92	90	76	65	61	57	57	57	68	96
16	57	59	59	59	59	61	61	61	69	84	86	86	84	86	90	88	88	88	84	78	71	80	76	67	74	90
17	71	80	76	74	73	71	73	71	(PF)	(PF)	84	86	82	73	94	84	74	69	59	57	57	55	53	51	71	94
18	51	55	53	51	55	49	45	41	49	55	84	96	104	(PF)	(PF)	102	82	76	67	53	41	43	47	39	61	104
19	35	33	35	33	33	31	31	35	45	76	88	104	102	102	94	102	100	102	96	96	88	76	76	73	70	104
20	55	53	55	57	65	63	65	65	88	98	98	96	106	(MT)	(MT)	(MT)	88	80	80	65	59	55	55	53	71	106
21	63	71	69	69	65	67	69	71	73	74	76	74	74	74	71	69	71	76	61	51	47	51	57	55	66	76
22	55	55	57	61	59	55	53	55	61	73	80	82	82	82	84	82	82	82	73	59	53	53	53	53	64	84
23	51	53	49	49	45	45	47	51	67	80	78	86	88	86	88	84	84	78	69	57	53	51	53	51	64	88
24	47	47	45	41	45	53	53	53	61	65	(PF)	78	59	65	67	65	63	57	41	25	24	33	33	35	50	78
25	33	31	35	39	37	37	37	41	59	63	65	69	69	65	73	88	88	84	67	63	59	55	53	63	57	88
26	55	61	65	45	61	57	118	104	108	102	96	112	108	108	106	104	100	106	102	100	100	98	94	90	88	112
27	90	90	92	90	94	(PF)	61	65	67	63	67	69	69	94	98	96	96	100	86	73	61	51	49	45	88	118
28	45	45	45	49	61	71	65	67	67	63	67	69	69	69	73	73	74	74	73	71	65	55	49	45	62	74
29	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
30	80	76	76	76	76	73	69	80	63	65	90	88	88	86	88	86	86	80	80	76	74	73	74	65	78	90
31	63	67	67	67	67	67	65	67	71	76	82	84	84	86	84	84	84	82	74	71	71	71	69	67	74	86
AV	56	57	57	56	57	54	56	58	66	74	83	85	85	84	86	87	87	83	74	67	61	60	59	58	69	
PK	90	90	92	90	94	73	118	104	108	102	112	110	108	114	106	122	118	112	102	100	100	98	94	90		122



OZONE  
(UG/M3)

CB-TRACT  
TRAILER AR23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	88	82	84	76	90	86	82	78	86	100	104	104	102	98	100	94	96	96	84	78	78	80	76	73	88	104
2	76	76	78	76	74	76	78	74	74	80	88	86	86	86	82	76	84	80	74	80	82	76	73	74	79	88
3	74	74	73	73	69	67	65	63	61	69	74	82	86	90	88	86	90	86	80	80	76	76	73	80	77	90
4	84	74	73	71	71	65	51	51	65	71	80	76	86	88	90	88	94	73	84	76	78	76	80	84	76	94
5	80	78	78	76	76	76	74	71	80	92	100	100	100	96	98	96	98	90	82	78	80	80	80	74	85	100
6	80	69	76	78	76	69	80	63	57	65	61	78	84	100	98	100	102	102	104	96	90	86	94	100	84	104
7	96	92	84	86	86	84	84	78	82	82	84	74	69	65	76	61	73	71	71	67	61	67	71	69	76	96
8	69	73	76	65	63	65	76	73	67	74	82	88	90	100	102	98	92	84	76	74	78	74	78	73	79	102
9	69	69	65	76	65	61	59	73	69	86	78	88	100	106	110	110	100	96	84	90	88	78	76	76	82	110
10	74	78	88	73	74	82	76	69	74	74	86	90	100	104	106	102	92	100	98	90	88	92	82	80	86	106
11	76	67	73	61	73	73	71	74	74	71	74	78	100	76	92	94	102	69	92	92	88	88	92	92	81	102
12	92	92	92	92	84	78	78	82	90	96	102	102	104	98	104	110	88	100	100	92	90	92	88	88	93	110
13	86	82	80	82	80	84	84	78	86	92	102	108	112	108	110	106	110	108	104	96	98	96	94	86	95	112
14	84	67	84	90	80	61	78	69	82	74	88	98	106	106	110	104	108	82	100	92	88	88	92	92	89	110
15	90	92	84	82	92	90	90	74	86	98	112	118	123	123	122	120	122	122	114	102	98	102	98	98	102	123
16	100	98	100	102	100	98	96	94	98	106	110	108	110	114	116	114	114	114	112	92	98	106	96	96	104	116
17	102	104	100	92	90	86	88	88	84	86	84	86	84	84	82	92	88	92	84	69	69	59	47	45	83	104
18	49	53	57	71	76	76	69	69	69	71	80	84	88	92	96	96	92	96	92	76	86	94	94	92	80	96
19	92	94	94	92	90	96	88	94	104	116	118	116	112	114	116	114	116	114	110	108	108	104	104	102	105	118
20	104	104	100	100	104	104	102	102	108	106	104	104	106	106	108	106	102	100	98	88	90	78	74	82	99	108
21	86	82	82	84	80	82	82	84	84	86	80	80	76	78	80	80	80	76	73	67	61	61	71	65	78	86
22	76	67	65	71	53	57	55	63	74	86	92	96	96	94	96	96	96	94	86	82	82	80	76	74	80	96
23	86	84	86	90	84	82	78	84	94	98	96	96	98	98	98	100	100	100	96	84	90	84	86	78	91	100
24	69	57	71	74	69	63	53	61	78	65	73	74	74	98	100	98	108	94	86	67	76	84	80	78	77	108
25	80	82	84	80	82	86	84	80	94	102	106	108	108	106	108	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	93	108
26	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	125
27	102	104	116	116	125	147	147	149	137	125	123	123	122	122	127	127	125	123	114	112	112	106	108	76	74	149
28	71	59	45	61	74	76	84	88	88	69	67	69	71	80	86	80	82	61	78	67	80	78	82	84	74	88
29	76	82	76	76	80	90	90	94	100	104	104	106	108	110	112	112	112	110	104	104	100	102	100	96	98	112
30	88	90	90	90	90	90	106	112	112	104	106	112	112	112	110	110	110	108	104	102	104	96	96	98	102	112
31	98	96	98	98	98	96	98	100	102	104	108	110	112	114	116	116	116	114	110	110	110	110	110	112	106	116
AV	83	81	82	82	82	82	82	81	85	88	92	95	97	99	102	100	100	96	94	87	88	86	85	84	89	
PK	104	104	116	116	125	147	147	149	137	125	123	123	123	123	127	127	125	123	114	112	112	110	110	112		149



CB-TRACT  
TRAILER AB20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

511/81-RPI)

CARBON MONOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	100	100	200	200	100	200	100	100	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	100	0	100	100	100	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	100	100	200	200	200	100	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100	100	100	100	100	100	100	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	0	0	0	0	0	0	0	0	0	0	100	100	200	200	200	100	200	200	100	100	100	100	0	0	200

SULFUR DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AH20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
8	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
9	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
10	8	5	5	5	5	8	8	8	5	8	8	8	8	8	3	3	3	3	8	8	8	8	8	8	4	8
11	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(IM)	(IM)	(IM)	5	5	5	5	5	5	5	5	5	5	6	8
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	3	3	3	3	3	3	3	3	3	4	5
13	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
14	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
15	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
16	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
17	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3
20	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3
22	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3
23	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3
24	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3
25	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
26	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
27	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
28	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
29	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)
30	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	3	3	3
AV	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	2	8
PK	8	5	5	5	5	8	8	8	5	8	8	8	8	8	5	8	5	5	8	8	8	8	8	8	8	8

SULFUR DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AH23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE	PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PK	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	



HYDROGEN SULFIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	1	1	1	1	1	1	1	1	1	3	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	3
7	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
8	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
9	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
11	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
14	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
15	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
16	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
17	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
18	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
19	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
20	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
21	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
22	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
23	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
24	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
25	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
26	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
27	1	1	1	1	3	1	3	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
PK	1	1	1	1	3	1	3	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3



PARTICULATE DATA  
UG/M3

CB-TRACT  
MAR 1981  
OCCIDENTAL OIL SHALE, INC

DAY	STATION		
	AB20	AB23	AD56
3	0.6	5.6	3.0
6	1.4	3.3	IM
9	IM	3.6	2.0
12	5.9	7.0	7.2
15	4.5	IM	4.1
18	5.9	5.1	6.4
27	1.5	15.3	12.7
30	1.1	8.4	8.4
PK	5.9	15.3	12.7
AV	3.0	6.9	6.3
GM	2.2	6.1	5.3

WIND SPEED @10M  
METERS/SEC

CB-TRACT  
TRAILER AB20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	1	1	1	1	1	1	0	0	3	1	2	1	3	2	1	2	1	1	2	2	2	2	2	3	1	3
2	1	2	2	1	3	1	0	1	1	0	3	5	3	1	3	1	0	0	1	1	1	1	1	1	1	5
3	1	0	(CM)	1	1	(CM)	(CM)	(CM)	(CM)	(CM)	0	1	1	1	2	1	0	0	1	1	0	1	1	1	1	2
4	3	4	4	4	4	3	2	3	3	3	3	3	3	3	2	2	1	1	0	0	(CM)	(CM)	0	(CM)	2	4
5	1	3	3	3	3	4	4	4	3	3	2	2	1	1	2	1	(CM)	(CM)	0	1	1	2	1	1	2	4
6	0	0	1	0	(CM)	(CM)	0	(CM)	(CM)	0	(CM)	0	2	1	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	1	2
7	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	0	2	2	2	3	2	1	1	0	0	0	0	(CM)	(CM)	0	1	3
8	(CM)	2	1	0	0	2	1	1	2	3	0	(CM)	2	1	2	2	2	1	0	0	(CM)	(CM)	(CM)	0	1	3
9	2	3	3	2	1	1	2	3	2	1	1	1	2	2	1	1	3	1	0	1	1	1	1	1	2	3
10	1	1	0	0	(CM)	(CM)	(CM)	(CM)	(CM)	1	2	3	1	2	1	1	0	(MT)	(MT)	0	0	1	1	1	1	3
11	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	0	2	3	3	3	2	1	0	0	0	1	1	1	1	3
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	1	1	0	(CH)	0	1	0	1	1	1	1
13	0	0	3	3	3	2	2	3	2	1	0	1	2	4	2	3	1	2	1	0	0	1	0	1	1	1
14	1	1	1	1	0	0	(CM)	0	0	1	2	2	1	3	2	3	2	1	1	1	1	1	1	1	1	3
15	1	2	1	2	2	1	1	2	2	0	0	0	2	1	2	2	1	1	1	1	1	1	1	1	1	3
16	3	4	4	4	4	2	4	4	3	2	4	4	4	4	3	2	2	2	4	2	1	1	1	1	1	4
17	2	1	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(PF)	1	1	3	3	1	2	1	0	1	0	0	0	1	1	1	1	2
18	(CM)	(CM)	(CM)	(CM)	(CM)	0	(CM)	(CM)	(CM)	0	0	0	1	(PF)	(PF)	0	0	1	0	0	0	1	1	1	1	3
19	4	3	4	4	3	3	3	2	1	1	3	2	3	3	3	2	2	2	2	1	0	1	1	1	1	3
20	1	1	2	1	1	1	1	1	2	2	2	3	4	(MT)	(MT)	3	3	1	3	(CM)	0	2	1	1	1	2
21	1	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	0	1	1	1	3	2	2	2	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	0	(CM)	2	4
22	3	3	3	3	2	3	0	1	1	1	0	1	1	1	0	2	3	1	0	1	1	1	3	2	2	3
23	1	1	0	(CM)	1	2	0	(CM)	0	0	1	2	2	2	3	5	2	1	0	1	1	1	1	1	1	2
24	(CH)	0	0	(CM)	1	1	1	2	1	2	(PF)	3	2	2	2	2	1	0	1	(CM)	1	2	3	2	1	3
25	2	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	1	4	3	4	2	2	2	3	3	2	0	1	1	1	2	3	1	2	4
26	1	2	1	0	2	2	2	2	3	4	5	4	5	5	7	5	5	4	4	6	5	3	2	2	3	7
27	0	1	(CM)	0	(CM)	(PF)	3	4	4	4	5	5	4	4	4	3	3	2	(CM)	1	0	(CM)	(CM)	(CM)	3	5
28	(CM)	(CM)	(CM)	1	0	(CM)	(CM)	(CM)	(CM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	(CM)	0	3	4
29	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	1
30	5	5	4	4	4	1	2	4	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	5
31	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	1	1	1	2	2	2	2	1	2	2	3	4	3	3	2	4
AV	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	2	7
PK	5	5	4	4	4	4	4	4	4	4	5	5	5	5	7	5	5	4	4	4	5	4	3	3	3	7

WIND SPEED @ 10M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	2	0	4	0	2	3	0	4	3	0	4	4	3	4	1	2	2	3	3	1	2	2	2	2	3
2	0	2	1	4	1	1	1	1	4	2	0	4	4	3	2	4	3	3	2	2	1	2	1	1	3	1
3	0	4	1	2	2	2	2	2	2	3	3	2	3	3	2	3	2	2	2	2	1	1	1	1	3	4
4	0	2	1	1	1	1	1	1	0	0	0	0	3	3	2	2	2	2	2	2	1	1	1	1	3	4
5	0	2	1	1	1	1	1	1	0	0	0	0	3	3	2	2	2	2	2	2	1	1	1	1	3	4
6	2	3	1	4	0	1	1	1	0	1	2	3	3	3	3	2	2	2	2	2	1	1	1	1	3	4
7	3	0	1	1	1	1	2	0	0	1	0	0	2	2	2	2	2	2	2	2	1	1	1	1	3	4
8	0	0	1	0	0	0	1	0	0	1	1	2	1	1	1	2	2	2	2	2	1	1	1	1	3	4
9	2	0	1	0	1	1	1	1	1	1	2	0	1	1	1	2	2	2	2	2	1	1	1	1	3	4
10	0	1	1	0	1	1	1	1	1	1	0	1	1	1	1	2	2	2	2	2	1	1	1	1	3	4
11	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	2	2	2	1	1	1	1	3	4
12	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	2	2	2	2	2	1	1	1	1	3	4
13	2	(CM)	2	2	2	2	2	2	(CA)	(CA)	(CA)	(CA)	2	4	2	4	4	3	2	1	2	2	2	2	3	4
14	0	0	1	1	2	0	1	1	0	1	1	1	3	4	2	3	3	3	3	2	1	1	1	1	3	4
15	1	1	1	1	0	1	1	1	1	1	6	2	2	0	2	5	2	5	5	4	0	2	1	1	3	4
16	1	2	2	2	3	3	3	2	4	4	4	3	6	6	5	2	4	3	4	1	2	2	2	2	3	4
17	4	4	5	4	3	3	2	3	4	4	4	4	6	6	6	4	4	3	4	1	1	1	1	1	7	4
18	0	0	1	1	1	1	1	1	1	1	5	4	4	5	2	0	8	2	1	1	1	1	1	1	7	4
19	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	1	1	1	1	7	4
20	1	2	1	3	4	3	4	4	7	4	4	6	4	4	6	4	4	3	4	1	1	1	1	1	7	4
21	3	2	2	2	1	1	2	2	3	4	3	3	3	0	3	2	2	1	0	1	1	1	1	1	7	4
22	1	1	2	2	1	0	1	2	1	1	2	1	4	1	2	3	1	2	1	1	1	1	1	1	7	4
23	1	1	0	2	1	1	1	1	1	4	5	4	4	3	3	4	4	2	1	1	2	2	2	2	7	4
24	1	2	2	2	2	2	2	2	3	4	3	3	4	4	4	5	7	8	1	2	2	2	2	2	7	4
25	4	6	5	3	4	6	4	6	4	5	7	6	8	10	10	7	7	8	4	6	1	4	7	4	10	4
26	2	3	2	2	4	2	4	2	7	8	7	5	6	5	5	5	5	4	2	5	0	0	1	1	8	4
27	0	0	0	1	1	1	1	2	0	4	6	7	6	7	5	5	5	4	4	2	0	2	2	1	7	4
28	2	1	0	0	1	1	1	0	0	3	4	4	5	4	5	5	5	4	4	2	4	2	2	1	7	4
29	4	5	5	5	4	4	4	4	3	3	3	2	1	3	4	4	4	1	4	2	2	1	1	1	7	4
30	4	2	2	2	3	3	2	3	3	4	4	4	4	4	4	4	4	4	4	2	4	2	2	1	7	4
31	1	2	2	2	3	3	2	3	3	4	4	4	4	4	4	4	4	3	4	4	4	2	2	2	7	4
AV	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2
PK	4	6	5	5	4	6	4	6	7	8	7	7	8	10	10	7	8	8	8	6	6	6	7	4	10	4

WIND SPEED ■ 30M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	1	0	0	1	1	4	4	4	1	4	3	2	2	2	4	5	3	3	4	4	2	5
2	3	3	5	5	5	4	3	4	4	3	6	7	5	5	8	5	3	2	3	5	2	2	2	4	4	8
3	2	1	1	1	2	1	1	2	1	1	1	1	2	2	3	4	4	4	3	2	2	3	2	4	2	4
4	5	5	5	5	6	5	5	5	4	5	5	5	4	4	4	3	3	2	1	1	2	2	1	2	4	6
5	0	1	2	2	3	4	3	3	3	(CM)	5	5	4	3	3	3	2	2	3	3	1	1	2	3	3	5
6	3	0	2	3	(CM)	1	1	1	0	(CM)	3	3	4	4	4	4	2	4	4	2	2	0	5	5	3	5
7	5	1	2	2	2	2	2	1	0	1	0	0	4	4	2	3	2	1	0	1	2	0	0	0	2	5
8	0	1	2	0	0	1	1	0	0	1	0	1	3	4	4	3	3	3	2	2	3	3	2	3	2	5
9	2	0	0	(CM)	(CM)	0	0	1	0	2	2	1	2	1	1	1	4	2	2	3	4	2	1	(CM)	2	3
10	0	2	2	1	1	1	0	2	0	2	2	2	1	2	3	3	3	4	3	1	(CM)	1	0	(CM)	2	4
11	0	0	(CM)	(CM)	1	1	1	0	0	1	1	1	1	3	3	3	3	2	2	3	3	0	3	(CM)	2	4
12	1	2	1	1	2	0	1	2	(CA)	1	2	2	1	1	(CM)	3	2	0	0	3	2	0	3	1	1	3
13	2	1	1	2	2	0	2	2	(CA)	(CA)	(CA)	(CA)	4	6	5	4	4	3	3	2	0	0	1	2	2	6
14	1	0	0	0	1	0	1	1	0	1	1	3	4	5	3	4	4	4	4	3	3	2	2	2	2	5
15	0	2	2	1	1	0	0	0	1	1	1	2	2	1	3	4	4	4	4	5	2	1	2	2	2	5
16	1	3	4	3	3	4	4	3	3	6	7	8	8	8	8	8	6	7	6	3	4	8	2	2	2	8
17	5	6	8	5	4	4	4	4	6	6	4	4	4	4	3	2	2	1	6	3	1	0	1	2	2	8
18	1	0	0	1	1	1	2	0	1	2	1	1	1	1	0	1	0	1	(CM)	1	0	0	(CM)	(CM)	4	4
19	3	3	3	3	3	2	3	3	1	6	7	5	5	7	7	6	10	8	7	5	3	4	2	2	1	10
20	2	3	3	5	5	4	5	5	9	6	6	7	8	7	8	5	5	4	5	2	2	2	2	3	4	9
21	4	3	1	3	1	2	3	4	4	5	4	4	4	4	4	4	0	1	0	2	2	1	0	2	5	5
22	1	2	2	4	0	0	1	1	2	2	2	1	1	0	3	3	3	1	1	1	1	1	0	1	3	4
23	1	2	(CM)	0	1	0	2	3	2	1	1	3	2	2	3	4	3	3	3	1	2	2	3	0	2	4
24	1	1	3	4	1	1	3	2	6	6	7	6	5	6	6	5	1	1	1	2	2	2	1	1	4	4
25	1	2	3	2	1	2	3	2	4	6	4	4	5	4	4	7	9	3	2	3	2	2	3	0	7	7
26	5	9	7	5	5	4	5	6	5	7	9	8	11	13	13	10	6	10	11	10	8	6	9	6	13	13
27	4	5	4	3	6	9	6	9	10	12	10	10	7	7	7	6	7	6	3	2	1	0	1	1	6	8
28	0	0	0	2	2	2	2	2	3	6	8	7	7	8	6	6	7	6	7	4	4	4	3	1	4	9
29	2	2	1	1	2	3	1	1	1	4	4	4	6	5	6	7	7	6	6	4	6	9	7	4	4	8
30	5	7	8	8	7	7	6	5	4	4	4	2	2	4	6	3	1	1	2	3	3	1	2	1	4	8
31	1	3	4	4	4	5	4	3	4	5	5	5	6	5	5	5	5	4	5	6	5	4	3	3	4	6
AV	2	2	3	3	2	2	3	3	3	4	4	4	4	4	5	4	4	3	3	3	3	2	2	2	3	3
PK	5	9	8	8	7	9	6	9	10	12	10	10	11	13	13	10	10	10	11	10	8	9	9	6	13	13

WIND SPEED @ 60M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	1	0	0	0	0	1	1	4	4	4	1	4	3	3	2	3	5	6	6	4	4	4	3	6
2	4	4	6	6	6	4	4	4	1	3	7	7	6	6	8	6	4	3	4	6	3	3	2	5	5	8
3	3	2	1	1	2	1	1	1	1	1	1	1	2	2	4	4	4	4	3	3	2	4	3	4	2	4
4	5	6	6	6	6	6	6	6	5	6	5	5	4	5	4	4	4	3	1	0	0	2	0	2	4	6
5	1	2	3	2	2	4	3	4	3	4	(CM)	5	4	4	3	2	2	2	4	4	4	1	3	4	3	5
6	4	(CM)	2	1	1	2	1	0	2	0	(CM)	3	4	6	4	5	4	2	5	1	3	2	5	4	4	6
7	7	7	1	1	2	2	2	1	1	1	3	4	4	4	4	3	2	4	4	2	2	1	5	7	3	7
8	0	0	3	1	1	1	0	0	0	0	(CM)	1	3	2	2	3	3	3	3	3	1	3	2	1	2	3
9	3	1	(CM)	(CM)	0	0	1	1	0	1	2	2	2	2	2	2	5	5	2	2	4	3	2	3	2	5
10	0	2	2	2	3	2	1	1	0	0	2	2	2	2	3	3	3	3	4	4	0	3	0	1	2	5
11	(CM)	1	0	0	0	2	1	1	1	2	2	2	1	3	3	3	3	3	3	3	0	2	4	0	2	4
12	2	2	2	2	2	0	1	1	1	1	1	1	1	1	1	1	2	0	1	2	3	2	2	2	2	3
13	3	3	1	0	1	0	2	2	(CA)	(CA)	(CA)	(CA)	4	6	4	5	4	4	3	2	0	0	1	2	2	3
14	3	1	0	0	(CM)	1	1	1	1	0	2	2	4	5	3	4	4	5	4	4	4	2	2	2	2	3
15	0	1	1	1	1	1	0	0	1	0	1	2	2	1	3	4	4	4	4	5	4	2	3	3	2	5
16	2	3	4	3	4	4	5	4	3	6	8	8	8	8	8	8	7	8	7	3	6	9	3	3	6	9
17	6	7	9	7	4	5	4	5	7	7	5	4	4	4	4	3	2	1	(CM)	1	0	0	(CM)	1	1	4
18	1	0	1	2	1	2	2	(CM)	1	2	1	1	1	7	1	1	12	2	2	0	4	7	6	4	2	7
19	3	3	3	4	3	4	3	4	2	7	8	6	6	8	7	7	5	8	1	6	3	3	3	4	5	12
20	3	3	2	6	6	4	6	6	10	7	6	8	8	5	8	6	1	5	6	1	2	3	4	4	5	10
21	4	4	4	4	2	3	4	4	5	5	4	4	5	0	4	3	1	1	0	1	1	2	1	2	5	5
22	2	1	2	4	1	1	2	0	2	2	2	1	1	2	3	4	3	4	4	0	1	3	1	2	3	12
23	2	2	1	0	1	0	3	4	2	2	8	7	2	0	4	6	3	3	1	2	2	2	1	2	2	5
24	2	2	4	4	1	2	3	3	2	6	8	4	6	4	4	7	7	1	1	2	1	2	4	2	2	10
25	1	1	3	2	0	2	3	3	4	6	4	4	5	6	6	7	1	4	3	4	3	3	4	2	4	15
26	7	11	9	7	7	5	7	7	5	8	10	9	12	15	14	11	10	11	12	11	9	8	10	7	9	13
27	4	6	4	4	7	10	7	10	11	13	10	10	8	7	8	7	7	7	4	3	2	1	2	0	6	13
28	1	1	1	2	2	3	3	3	3	6	8	7	8	9	8	7	8	7	8	4	4	4	4	1	5	9
29	1	3	2	2	3	4	2	2	1	4	5	5	7	6	7	8	8	7	7	6	7	11	8	4	5	11
30	6	8	8	9	8	8	7	6	6	4	4	3	2	4	6	4	2	1	2	4	4	2	3	2	5	9
31	0	3	6	5	5	6	6	6	5	5	6	5	6	6	6	5	6	5	7	7	6	4	3	4	5	7
AV	3	3	3	3	3	3	3	3	3	4	5	4	4	5	5	5	4	4	4	3	3	3	3	3	4	4
PK	7	11	9	9	8	10	7	10	11	13	10	10	12	15	14	11	12	11	12	11	9	11	10	7	7	15



WIND SPEED @10M

C-B TRACT  
MRI AD42  
March, 1981

DATA NOT AVAILABLE AT REPORT TIME

WIND SPEED @10M

C-B TRACT  
MRI AD56  
March, 1981

DATA NOT AVAILABLE AT REPORT TIME

WIND DIRECTION @10M  
DEGREES

CB-TRACT  
TRAILER AB20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	98	101	102	103	100	101	102	114	136	124	239	208	7	31	132	283	259	155	105	118	118	113	123	130	118
2	133	125	133	122	129	109	110	135	138	99	149	143	131	167	178	251	76	83	106	93	105	78	97	112	121
3	125	122	(CM)	118	99	(CM)	(CM)	(CM)	(CM)	(CM)	90	270	22	4	301	251	76	83	106	93	105	78	97	356	82
4	276	274	277	276	274	281	294	302	310	289	304	298	313	313	313	302	310	305	20	59	(CM)	(CM)	102	(CM)	302
5	102	134	131	138	139	133	135	135	133	110	203	213	197	228	234	256	(CM)	(CM)	39	107	105	124	125	124	143
6	97	111	99	99	(CM)	(CM)	98	(CM)	(CM)	96	(CM)	0	291	270	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	( )
7	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	284	278	283	291	282	305	319	297	284	53	22	(CM)	(CM)	(CM)	82	309
8	(CM)	125	124	129	99	103	104	99	127	136	143	(CM)	280	307	338	292	337	302	290	(CM)	(CM)	(CM)	(CM)	113	106
9	76	125	128	131	107	116	127	139	139	135	301	302	292	282	299	294	289	294	58	109	109	109	106	100	114
10	101	120	109	99	(CM)	(CM)	(CM)	(CM)	(CM)	304	290	281	284	283	358	27	78	(MT)	114	106	106	104	101	111	79
11	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	82	287	274	273	276	288	333	22	109	114	117	140	(CM)	324
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	253	86	272	164	(CM)	109	113	98	98	119	( )
13	107	104	135	138	137	140	132	123	131	135	180	161	134	268	235	272	220	149	105	83	99	110	115	109	137
14	105	104	129	121	102	102	(CM)	104	125	286	284	277	349	316	328	332	339	318	49	115	112	103	113	124	77
15	106	134	117	117	140	131	111	139	140	140	270	215	274	281	301	233	213	252	58	94	101	90	96	131	141
16	130	132	131	129	127	119	118	132	131	180	173	183	172	190	182	208	228	249	299	312	153	115	85	125	155
17	255	275	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(PF)	(PF)	297	288	283	321	281	290	321	(CM)	48	50	85	120	127	(CM)	310
18	(CM)	(CM)	(CM)	(CM)	(CM)	30	(CM)	(CM)	(CM)	310	297	294	297	(PF)	(PF)	139	338	283	45	84	125	123	121	125	37
19	127	129	129	132	134	128	128	133	107	97	179	182	162	166	180	193	214	166	129	143	107	120	114	118	141
20	109	104	119	125	127	108	106	106	215	215	178	174	164	(MT)	(MT)	104	163	109	301	(CM)	(CM)	(CM)	142	(CM)	138
21	306	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	309	297	314	310	324	328	19	28	(CM)	(CM)	(CM)	(CM)	(CM)	118	108	131	341
22	120	127	131	111	135	137	145	138	139	135	121	128	123	124	339	125	111	111	101	101	112	107	130	130	122
23	131	134	135	(CM)	103	124	129	(CM)	113	289	291	289	294	315	129	118	110	120	107	114	121	130	120	129	124
24	(CM)	112	354	(CM)	107	133	131	122	112	296	(PF)	310	303	319	338	328	135	196	45	(CM)	131	118	133	130	103
25	133	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	132	93	92	114	176	215	173	153	173	193	207	113	106	104	106	111	110	137
26	101	114	125	120	130	112	108	121	145	164	155	149	158	167	153	135	135	147	148	133	131	121	204	152	138
27	261	295	(CM)	120	(CM)	(PF)	118	127	140	143	135	144	153	179	173	181	202	219	(CM)	50	105	(CM)	(CM)	(CM)	155
28	(CM)	(CM)	(CM)	129	121	(CM)	(CM)	(CM)	(CM)	281	297	304	312	319	318	313	318	312	315	319	(CM)	23	(CM)	122	319
29	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
30	90	121	127	127	121	112	317	296	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
31	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	150	191	192	217	229	229	170	174	168	127	119	129	129	132	130	164
PV	115	123	123	123	121	117	118	126	132	163	224	236	266	274	271	254	241	206	67	94	113	108	117	119	115

WIND DIRECTION @ 10M  
DEGREES

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	199	221	254	166	230	(CM)	235	168	137	214	213	204	328	37	70	338	300	189	167	173	170	157	140	140	190
2	156	145	179	171	176	161	153	171	161	160	171	159	161	185	212	240	216	148	156	184	183	180	168	173	173
3	174	85	101	159	171	222	213	299	238	207	345	11	41	44	335	354	8	14	22	22	22	47	304	302	4
4	306	319	319	320	325	330	339	339	346	337	346	333	339	339	339	346	333	335	305	215	213	223	210	222	315
5	207	120	170	105	109	120	118	108	123	177	209	230	242	236	220	234	171	268	262	231	215	148	146	126	178
6	161	(CM)	128	160	241	245	143	249	280	191	(CM)	290	287	241	243	243	232	203	199	(CM)	55	138	179	185	211
7	183	145	96	126	137	122	95	117	76	355	316	330	324	330	343	333	310	300	209	228	225	222	251	218	247
8	214	156	161	(CM)	196	161	225	165	121	113	37	326	323	348	342	339	342	333	251	234	141	151	163	120	182
9	116	129	107	251	238	153	131	259	49	11	338	347	354	345	262	292	312	321	15	153	181	204	225	264	279
10	83	122	151	158	212	195	263	261	293	314	308	319	346	8	22	10	22	55	76	220	231	220	112	270	295
11	234	63	214	326	230	243	231	(CM)	313	289	338	29	143	321	330	326	303	330	275	220	201	121	186	180	269
12	177	189	200	234	237	192	162	161	202	201	156	192	131	344	247	115	349	11	178	201	189	171	235	180	191
13	220	(CM)	122	124	124	180	143	109	(CA)	(CA)	(CA)	(CA)	229	257	217	248	230	181	159	238	209	192	185	170	187
14	176	124	227	225	226	261	210	249	299	337	319	319	326	349	1	357	353	337	306	269	239	223	229	238	278
15	172	153	214	199	158	230	185	247	73	356	11	11	357	211	261	253	227	228	216	216	143	108	65	133	197
16	110	120	129	144	126	146	148	133	192	208	204	204	201	212	206	211	231	235	270	249	229	208	137	180	185
17	259	300	274	278	298	306	292	281	301	304	309	312	311	338	322	9	344	5	214	224	223	225	225	225	288
18	225	225	223	223	222	223	224	233	317	299	315	321	317	16	355	0	19	196	197	220	205	201	202	103	248
19	134	137	128	134	127	135	126	170	146	208	209	205	208	208	216	228	222	205	196	195	155	161	159	166	174
20	183	179	160	181	206	178	180	176	205	218	213	200	194	191	206	198	205	223	274	103	175	217	220	262	198
21	283	271	251	251	251	299	294	286	299	300	330	342	343	346	34	35	61	40	166	208	218	195	141	227	288
22	159	217	107	138	192	215	248	90	88	99	43	35	63	0	79	106	219	213	206	135	134	130	(CM)	127	132
23	188	184	90	192	242	169	154	146	123	49	349	335	320	341	143	136	109	103	152	207	196	216	227	103	159
24	283	248	274	296	189	135	128	143	184	319	327	331	336	353	355	347	98	327	221	223	209	177	180	121	252
25	107	110	129	106	104	124	120	93	143	168	171	243	241	214	191	213	220	197	155	147	184	136	172	55	155
26	176	185	193	184	168	148	145	154	178	176	193	185	186	196	180	170	175	185	182	169	163	201	224	208	180
27	220	245	212	186	197	173	163	172	177	181	176	171	187	199	201	190	195	212	209	202	270	249	253	228	202
28	197	294	83	126	162	209	245	267	296	321	329	332	339	347	349	341	340	333	341	327	304	278	273	246	305
29	215	193	148	151	153	180	130	135	189	229	209	224	226	219	207	220	217	192	174	168	168	181	174	141	185
30	147	179	189	193	212	287	292	279	252	335	333	35	73	16	3	38	77	168	161	161	161	160	161	161	173
31	161	161	161	160	161	161	164	199	206	208	218	210	217	225	217	196	207	193	176	177	170	139	149	158	183
PV	186	171	168	178	192	189	181	188	196	251	291	297	294	307	278	292	270	243	205	203	193	182	190	191	214



WIND DIRECTION @ 30M  
DEGREES

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	96	74	329	90	137	63	219	135	102	124	125	124	63	34	67	337	298	148	122	118	126	118	106	110	102
2	109	110	122	126	123	118	124	122	117	112	120	118	117	120	124	140	126	109	111	119	118	124	132	122	120
3	120	76	118	118	118	118	119	118	117	138	344	2	36	43	331	350	4	10	18	19	25	44	311	300	51
4	304	317	317	319	323	323	330	338	343	335	343	332	337	338	336	343	331	338	0	125	115	122	118	128	342
5	113	100	121	94	93	91	96	88	95	122	128	138	144	148	134	140	119	160	160	145	131	101	101	92	119
6	112	83	95	107	(CM)	270	110	155	167	(CM)	(CM)	283	284	236	241	154	138	124	121	101	47	101	124	119	131
7	121	124	77	92	100	91	77	86	60	355	312	329	322	329	341	334	313	308	102	140	134	85	299	125	53
8	135	114	107	95	0	93	135	135	109	106	71	326	323	345	342	338	342	335	260	258	112	134	151	97	77
9	93	82	101	(CM)	(CM)	172	114	129	66	20	337	347	351	346	168	217	308	317	7	132	156	144	127	(CM)	84
10	55	116	123	129	119	110	307	273	284	311	304	318	347	7	17	8	25	50	55	73	(CM)	221	101	(CM)	30
11	255	36	(CM)	(CM)	152	248	270	135	306	281	330	54	93	320	329	324	300	335	285	214	125	122	123	122	303
12	119	118	120	138	137	125	115	119	124	123	113	121	101	345	(CM)	87	349	5	153	122	123	118	115	120	113
13	124	113	120	120	98	132	141	95	(CA)	(CA)	(CA)	(CA)	129	144	129	239	225	173	146	243	219	151	160	156	148
14	172	127	153	141	231	94	151	262	306	336	320	315	319	342	355	353	349	333	311	288	256	234	251	295	295
15	96	122	191	212	117	234	109	0	71	352	8	7	352	208	256	247	224	221	212	201	193	133	214	146	189
16	144	117	119	138	114	125	142	131	178	202	198	198	194	207	201	205	224	230	263	259	231	204	170	204	184
17	253	296	272	273	295	298	294	285	292	301	305	307	307	332	319	4	341	16	(CM)	193	(CM)	199	(CM)	(CM)	298
18	40	135	335	44	41	124	134	251	316	298	317	319	316	17	13	7	25	187	188	192	202	195	193	121	355
19	137	148	136	136	127	146	132	178	141	201	201	198	203	202	209	222	216	199	188	190	151	155	154	159	172
20	169	176	141	170	202	170	172	166	199	212	205	193	188	184	199	193	199	220	264	66	156	217	213	259	191
21	281	269	251	249	255	292	292	281	294	296	325	337	338	339	28	29	51	31	120	167	203	196	111	248	294
22	145	212	102	120	171	185	255	97	84	90	38	34	63	6	70	99	217	210	207	111	125	184	250	143	132
23	198	194	(CM)	160	317	204	128	131	112	46	343	326	316	335	133	127	96	92	110	166	168	174	189	166	145
24	302	270	280	295	201	130	123	141	177	312	323	327	331	348	349	341	82	326	223	241	204	172	168	155	263
25	138	100	123	115	95	116	124	109	138	158	166	236	233	206	184	207	215	191	149	138	180	144	169	141	156
26	170	180	186	183	163	134	140	145	169	169	176	179	179	188	172	161	166	176	174	160	155	192	219	202	172
27	209	238	207	179	191	165	155	164	169	173	168	163	179	192	194	183	188	205	202	201	280	307	303	241	197
28	171	253	73	121	155	201	241	265	293	316	325	327	333	342	342	336	336	329	337	327	311	282	285	279	305
29	217	199	191	184	162	192	170	161	197	222	201	219	220	212	201	214	210	185	168	161	166	173	168	130	189
30	135	172	186	187	206	282	289	276	249	331	331	29	65	34	33	29	70	68	69	68	69	70	69	69	54
31	68	69	69	69	69	69	69	168	200	201	211	205	212	221	210	191	200	186	171	171	164	129	141	167	159
PV	140	133	132	136	140	145	142	147	149	259	313	316	329	322	321	296	281	215	164	160	157	155	161	150	138



WIND DIRECTION @ 60M  
DEGREES

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	42	0	94	35	75	311	90	104	47	83	82	76	175	268	301	207	169	51	33	48	41	35	17	27	53
2	14	30	44	42	30	31	42	31	18	23	40	29	30	54	82	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	36
3	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	191	226	264	273	202	222	234	242	250	252	262	280	193	175	234
4	179	192	191	194	196	197	205	212	215	209	215	205	211	210	206	215	203	210	231	16	51	50	8	89	200
5	90	50	61	32	24	2	15	356	358	48	77	100	111	103	86	99	39	145	150	126	111	5	354	349	59
6	17	(CM)	358	18	(CM)	147	74	117	159	141	(CM)	149	156	111	116	112	102	76	70	67	282	10	61	60	89
7	58	54	350	7	14	0	341	354	320	221	183	199	194	200	212	206	185	192	321	103	106	90	210	16	187
8	45	7	350	11	120	9	45	130	348	355	(CM)	180	197	216	215	208	213	213	151	152	338	1	31	3	30
9	7	133	(CM)	(CM)	236	71	20	352	321	265	206	215	218	217	125	159	177	186	231	356	16	24	36	165	203
10	323	8	344	353	33	40	345	161	150	181	176	190	224	240	249	240	260	283	283	298	306	155	156	305	266
11	(CM)	152	135	202	202	160	166	145	166	144	184	326	0	195	201	194	170	206	165	95	74	48	54	52	154
12	68	74	79	112	104	65	46	37	75	64	24	61	11	213	107	343	220	197	40	53	58	63	68	66	66
13	79	71	5	59	32	68	22	40	(CA)	(CA)	(CA)	(CA)	222	253	213	256	231	184	170	256	261	139	152	164	161
14	184	197	176	132	(CM)	81	125	261	298	343	335	325	328	350	2	1	359	343	325	311	286	274	294	310	318
15	39	115	185	240	190	259	173	45	88	0	19	10	2	221	266	254	233	230	222	216	213	201	209	192	219
16	183	147	145	161	135	146	163	155	183	211	206	206	202	215	209	212	231	237	269	246	238	216	199	208	197
17	257	303	284	286	305	309	300	288	304	306	311	315	315	340	329	9	349	24	(CM)	165	170	173	(CM)	299	305
18	16	15	340	54	66	132	132	132	321	311	328	325	322	24	43	7	30	193	210	225	216	211	205	168	349
19	166	178	167	159	155	176	172	198	161	208	209	206	212	210	216	227	224	229	197	200	169	171	171	174	189
20	179	191	150	185	212	184	144	180	208	220	211	199	198	193	207	202	208	229	271	41	173	244	234	270	204
21	289	274	262	257	268	298	301	292	304	307	333	346	347	348	37	40	56	28	48	168	222	224	158	267	307
22	148	216	98	125	153	161	269	204	105	101	53	41	76	6	76	108	228	221	223	138	174	211	236	207	154
23	221	218	235	207	296	321	137	134	121	55	353	332	324	343	143	143	105	104	116	158	169	183	185	195	166
24	301	294	296	305	238	156	142	160	192	321	333	337	341	357	358	352	82	330	246	264	213	174	171	183	278
25	210	90	142	161	323	130	151	151	155	170	180	241	238	213	192	214	221	201	168	155	196	175	182	188	182
26	182	195	198	197	179	153	159	158	177	178	186	189	189	197	182	172	176	186	184	172	169	201	227	211	184
27	215	245	218	192	201	176	168	176	180	184	178	174	187	200	201	191	198	212	211	219	290	339	340	321	206
28	169	233	103	143	176	221	260	280	299	325	337	337	344	352	352	347	347	340	349	341	326	304	310	305	317
29	252	220	216	212	199	215	208	194	206	228	210	225	228	219	208	221	216	195	180	174	184	186	180	145	205
30	150	187	201	199	215	289	297	283	259	342	344	39	73	20	5	43	80	148	137	176	168	219	281	293	237
31	209	228	233	233	207	204	207	212	210	209	218	211	221	227	216	200	208	197	187	188	181	152	166	188	205
PV	158	179	171	169	184	152	146	170	203	245	234	242	242	241	193	206	199	205	205	176	203	190	193	215	206

WIND DIRECTION @10M

C-B TRACT  
MRI AD42  
March, 1981

DATA NOT AVAILABLE AT REPORT TIME

WIND DIRECTION @10M

C-B TRACT  
MRI AD56  
March, 1981

DATA NOT AVAILABLE AT REPORT TIME

WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
10 METER LEVEL

CB-TRACT  
TRAILER AR20  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																								VECTOR	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL
1	98	101	102	103	100	101	102	114	136	124	239	208	7	31	132	283	259	155	105	118	118	113	123	130	116	0.8
2	133	125	133	122	129	109	110	135	138	99	149	143	131	167	178	251	76	83	106	93	105	78	97	112	132	1.3
3	125	122	***	118	99	***	***	***	***	***	90	270	22	4	301	251	76	83	106	93	105	78	97	356	59	0.3
4	276	274	277	276	274	281	294	302	310	289	304	298	313	313	313	302	310	305	20	59	***	***	102	***	294	2.2
5	102	134	131	138	139	133	135	135	133	110	203	213	197	228	234	256	***	***	39	107	105	124	125	124	141	1.7
6	97	111	99	99	***	***	98	***	***	96	***	0	291	270	***	***	***	***	***	***	***	***	***	***	***	***
7	***	***	***	***	***	***	***	***	***	284	278	283	291	282	305	319	297	284	53	22	***	***	***	82	295	1.1
8	***	125	124	129	99	103	104	99	127	136	143	***	280	307	338	292	337	302	290	***	***	***	***	113	103	0.3
9	76	125	128	131	107	116	127	139	139	135	301	302	292	282	299	294	289	294	58	109	109	109	106	100	130	0.4
10	101	120	109	99	***	***	***	***	***	304	290	281	284	283	358	27	78	***	***	114	106	104	101	111	350	0.1
11	***	***	***	***	***	***	***	***	***	***	***	82	287	274	273	276	288	333	22	109	114	117	140	***	280	0.9
12	***	***	***	***	***	***	***	***	***	***	***	***	***	***	253	86	272	164	***	109	113	98	98	119	***	***
13	107	104	135	138	137	140	132	123	131	135	180	161	134	268	235	272	220	149	105	83	99	110	115	109	151	1.0
14	105	104	129	121	102	102	***	104	125	286	284	277	349	316	328	332	339	318	49	115	112	103	113	124	354	0.3
15	106	134	117	117	140	131	111	139	140	140	270	215	274	281	301	233	213	252	58	94	101	90	96	131	145	0.7
16	130	132	131	129	127	119	118	132	131	180	173	183	172	190	182	208	228	249	299	312	153	115	85	125	154	2.0
17	255	275	***	***	***	***	***	***	***	***	297	288	283	321	281	290	321	***	48	50	85	120	127	***	290	0.8
18	***	***	***	***	***	30	***	***	***	310	297	294	297	***	***	139	338	283	45	84	125	123	121	125	104	0.2
19	127	129	129	132	134	128	128	133	107	97	179	182	162	166	180	193	214	166	129	143	107	120	114	118	145	2.0
20	109	104	119	125	127	108	106	106	215	215	178	174	164	***	***	104	163	109	301	***	***	***	142	***	150	1.2
21	306	***	***	***	***	***	***	***	309	297	314	310	324	328	19	28	***	***	***	***	***	118	108	131	359	0.6
22	120	127	131	111	135	137	145	138	139	135	121	128	123	124	339	125	111	111	101	101	112	107	130	130	123	1.6
23	131	134	135	***	103	124	129	***	113	289	291	289	294	315	129	118	110	120	107	114	121	130	120	129	124	0.8
24	***	112	354	***	107	133	131	122	112	296	***	310	303	319	338	328	135	196	45	***	131	118	133	130	80	0.2
25	133	***	***	***	***	***	***	132	93	92	114	176	215	173	153	173	193	207	113	106	104	106	111	110	133	1.7
26	101	114	125	120	130	112	108	121	145	164	155	149	158	167	153	135	135	147	148	133	131	121	204	152	143	3.2
27	261	295	***	120	***	***	118	127	140	143	135	144	153	179	173	181	202	219	***	50	105	***	***	***	153	2.3
28	***	***	***	129	121	***	***	***	***	281	297	304	312	319	318	313	318	312	315	319	***	23	***	122	311	2.3
29	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
30	90	121	127	127	121	112	317	296	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
31	***	***	***	***	***	***	***	***	***	150	191	192	217	229	229	170	174	168	127	119	129	129	132	130	157	1.6
VD	116	128	130	129	130	124	120	131	133	165	203	222	248	262	227	224	221	203	81	105	118	113	119	122	139	
VV	1.1	1.4	1.6	1.4	1.6	1.4	1.2	1.4	1.5	0.5	0.8	0.9	0.7	1.0	0.7	0.5	0.5	0.4	0.4	0.7	1.2	1.3	1.3	1.4		0.8

TOTAL NUMBER OF OBSERVATIONS = 550

NOTE: \*\*\* = MISSING DATA



WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
10 METER LEVEL

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)										VECTOR															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL
1	199	221	254	166	230	***	235	168	137	214	213	204	328	37	70	338	300	189	167	173	170	157	140	140	181	1.0
2	156	145	179	171	176	161	153	171	161	160	171	159	161	185	212	240	216	148	156	184	183	180	168	173	176	2.5
3	174	85	101	159	171	222	213	289	238	207	345	11	41	44	335	354	8	14	22	22	22	47	304	302	1	0.7
4	306	319	319	320	325	325	330	339	346	337	346	333	339	339	339	346	333	335	305	215	213	223	210	222	325	2.5
5	207	120	170	105	109	120	118	108	123	177	209	230	242	236	220	234	171	268	262	231	215	148	146	126	185	1.1
6	161	***	128	160	241	245	143	249	280	191	***	290	287	241	243	243	232	203	199	***	55	138	179	185	214	1.2
7	183	145	96	126	137	122	95	117	76	355	316	330	324	330	343	333	310	300	209	228	225	222	251	218	304	0.4
8	214	156	161	***	196	161	225	165	121	113	37	326	323	348	342	339	342	333	251	234	141	151	163	120	281	0.1
9	116	129	107	251	238	153	131	259	49	11	338	347	354	345	262	292	312	321	15	153	181	204	225	264	300	0.3
10	83	122	151	158	212	195	263	261	293	314	308	319	346	8	22	10	22	55	76	220	231	220	112	270	339	0.4
11	234	63	214	326	230	243	231	***	313	289	338	29	143	321	330	326	303	330	275	220	201	121	186	180	275	0.6
12	177	189	200	234	237	192	162	161	202	201	156	192	131	344	247	115	349	11	178	201	189	171	235	180	185	0.7
13	220	***	122	124	124	180	143	109	***	***	***	***	229	257	217	248	230	181	159	238	209	192	185	170	199	1.4
14	176	124	227	225	226	261	210	249	299	337	319	319	326	349	1	357	353	337	306	269	239	223	229	238	308	1.0
15	172	153	214	199	158	230	185	247	73	356	11	11	357	211	261	253	227	228	216	216	143	108	65	133	220	0.6
16	110	120	129	144	126	146	148	133	192	208	204	204	201	212	206	211	231	235	270	249	229	208	137	180	200	2.8
17	259	300	274	278	298	306	292	281	301	304	309	312	311	338	322	9	344	5	214	224	223	225	225	225	297	2.2
18	225	225	223	223	222	223	224	233	317	299	315	321	317	16	355	0	19	196	197	220	205	201	202	103	231	0.6
19	134	137	128	134	127	135	126	170	146	208	209	205	208	208	216	228	222	205	196	195	155	161	159	166	193	2.7
20	183	179	160	181	206	178	180	176	205	218	213	200	194	191	206	198	205	223	274	103	175	217	220	262	202	3.0
21	283	271	251	251	251	299	294	286	299	300	330	342	343	346	34	35	61	40	166	208	218	195	141	227	308	1.1
22	159	217	107	138	192	215	248	90	88	99	43	35	63	0	79	106	219	213	206	135	134	130	***	127	131	0.7
23	188	184	90	192	242	169	154	146	123	49	349	335	320	341	143	136	109	103	152	207	196	216	227	103	146	0.5
24	283	248	274	296	189	135	128	143	184	319	327	331	336	353	355	347	98	327	221	223	209	177	180	121	314	1.0
25	107	110	129	106	104	124	120	93	143	168	171	243	241	214	191	213	220	197	155	147	184	136	172	55	174	1.8
26	176	185	193	184	168	148	145	154	178	176	183	185	186	196	180	170	175	185	182	169	163	201	224	208	182	5.6
27	220	245	212	186	197	173	163	172	177	181	176	171	187	199	201	190	195	212	209	202	270	249	253	228	190	3.8
28	197	294	83	126	162	209	245	267	296	321	329	332	339	347	349	341	340	333	341	327	304	278	273	246	327	2.4
29	215	193	148	151	153	180	130	135	189	229	209	224	226	219	207	220	217	192	174	168	168	181	174	141	197	2.7
30	147	179	189	193	212	287	292	279	252	335	333	35	73	16	3	38	77	168	161	161	161	160	161	161	221	0.7
31	161	161	161	160	161	161	164	199	206	208	218	210	217	225	217	196	207	193	176	177	170	139	149	158	190	2.8
VD	193	185	187	183	191	191	182	187	207	232	238	245	250	259	232	247	244	219	208	196	189	186	191	176	210	
VV	0.9	0.8	1.0	1.0	1.1	0.8	0.8	0.8	0.8	1.2	1.2	1.1	1.2	1.2	1.1	0.9	1.2	1.1	1.2	1.5	1.3	1.2	1.2	1.0		1.0

TOTAL NUMBER OF OBSERVATIONS = 732

NOTE: \*\*\* = MISSING DATA



WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
30 METER LEVEL

CH-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																								VECTOR	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL
1	96	74	329	90	137	63	219	135	102	124	125	124	63	34	67	337	298	148	122	118	126	118	106	110	108	1.7
2	109	110	122	126	123	118	124	122	117	112	120	118	117	120	124	140	126	109	111	119	118	124	132	122	120	4.1
3	120	76	118	118	118	118	119	118	117	138	344	2	36	43	331	350	4	10	18	19	25	44	311	300	23	1.2
4	304	317	317	319	323	323	330	338	343	335	343	332	337	338	336	343	331	338	0	125	115	122	118	128	333	3.2
5	113	100	121	94	93	91	96	88	95	122	128	138	144	148	134	140	119	160	160	145	131	101	101	92	120	2.5
6	112	83	95	107	***	270	110	155	167	***	***	283	284	236	241	154	138	124	121	101	47	101	124	119	142	1.3
7	121	124	77	92	100	91	77	86	60	355	312	329	322	329	341	334	313	308	102	140	134	85	299	125	29	0.6
8	135	114	107	95	0	93	135	135	109	106	71	326	323	345	342	338	342	335	260	258	112	134	151	97	34	0.4
9	93	82	101	***	***	172	114	129	66	20	337	347	351	346	168	217	308	317	7	132	156	144	127	***	60	0.2
10	55	116	123	129	119	110	307	273	284	311	304	318	347	7	17	8	25	50	55	73	***	221	101	***	18	0.8
11	255	36	***	***	152	248	270	135	306	281	330	54	93	320	329	324	300	335	285	214	125	122	123	122	301	0.4
12	119	118	120	138	137	125	115	119	124	123	113	121	101	345	***	87	349	5	153	122	123	118	115	120	113	1.2
13	124	113	120	120	98	132	141	95	***	***	***	***	129	144	129	239	225	173	146	243	219	151	160	156	151	1.8
14	172	127	153	141	231	94	151	262	306	336	320	315	319	342	355	353	349	333	311	288	256	234	251	295	316	1.4
15	96	122	191	212	117	234	109	0	71	352	8	7	352	208	256	247	224	221	212	201	193	133	214	146	212	0.9
16	144	117	119	138	114	125	142	131	178	202	198	198	194	207	201	205	224	230	263	259	231	204	170	204	196	3.9
17	253	296	272	273	295	298	294	285	292	301	305	307	307	332	319	4	341	16	***	193	***	199	***	***	295	3.5
18	40	135	335	44	41	124	134	251	316	298	317	319	316	17	13	7	25	187	188	192	202	195	193	121	193	0.3
19	137	148	136	136	127	146	132	179	141	201	201	198	203	202	209	222	216	199	188	190	151	155	154	159	188	3.9
20	169	176	141	170	202	170	172	166	199	212	205	193	188	184	199	193	199	220	264	66	156	217	213	259	196	4.2
21	281	269	251	249	255	292	292	281	294	296	325	337	338	339	28	29	51	31	120	167	203	196	111	248	304	1.7
22	145	212	102	120	171	185	255	97	84	90	38	34	63	6	70	99	217	210	207	111	125	184	250	143	131	0.9
23	198	194	***	160	317	204	128	131	112	46	343	326	316	335	133	127	96	92	110	166	168	174	189	166	123	0.7
24	302	270	280	295	201	130	123	141	177	312	323	327	331	348	349	341	82	326	223	241	204	172	168	155	311	1.3
25	138	100	123	115	95	116	124	109	138	158	166	236	233	206	184	207	215	191	149	138	180	144	169	141	173	2.5
26	170	180	186	183	163	134	140	145	169	169	176	179	179	188	172	161	166	176	174	160	155	192	219	202	174	7.7
27	209	238	207	179	191	165	155	164	169	173	168	163	179	192	194	183	188	205	202	201	280	307	303	241	182	5.2
28	171	253	73	121	155	201	241	265	293	316	325	327	333	342	342	336	336	329	337	327	311	282	285	279	323	3.3
29	217	199	191	184	162	192	170	161	197	222	201	219	220	212	201	214	210	185	168	161	166	173	168	130	191	3.9
30	135	172	186	187	206	282	289	276	249	331	331	29	65	34	33	29	70	68	69	68	69	70	69	69	200	0.2
31	68	69	69	69	69	69	69	168	200	201	211	205	212	221	210	191	200	186	171	171	164	129	141	167	167	2.6
VD	156	167	158	153	153	149	144	158	190	216	218	227	235	235	190	206	228	203	186	162	158	166	166	148	179	
VV	1.0	1.0	1.1	1.2	1.1	0.8	1.0	1.1	1.0	1.1	0.9	0.8	1.0	0.9	1.0	0.9	1.3	1.2	1.2	1.6	1.6	1.6	1.4	1.3		1.0

TOTAL NUMBER OF OBSERVATIONS = 724

NOTE: \*\*\* = MISSING DATA

WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
60 METER LEVEL

CR-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																								VECTOR		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL	
1	42	0	94	35	75	311	90	104	47	83	82	76	175	268	301	207	169	51	33	48	41	35	17	27	47	1.6	
2	14	30	44	42	30	31	42	31	18	23	40	29	30	54	82	***	***	***	***	***	***	***	***	***	38	5.0	
3	***	***	***	***	***	***	***	***	***	***	191	226	264	273	202	222	234	242	250	252	262	280	193	175	232	2.6	
4	179	192	191	194	196	197	205	212	215	209	215	205	211	210	206	215	203	210	231	16	51	50	8	89	202	3.6	
5	90	50	61	32	24	2	15	356	358	48	77	100	111	103	86	99	39	145	150	126	111	5	354	349	62	1.9	
6	17	***	358	18	***	147	74	117	159	141	***	149	156	111	116	112	102	76	70	67	282	10	61	60	84	2.2	
7	58	54	350	7	14	0	341	354	320	221	183	199	194	200	212	206	185	192	321	103	106	90	210	16	170	0.4	
8	45	7	350	11	120	9	45	130	348	355	***	180	197	216	215	208	213	213	151	152	338	1	31	3	232	0.2	
9	7	133	***	***	236	71	20	352	321	265	206	215	218	217	125	159	177	186	231	356	16	24	36	165	166	0.1	
10	323	8	344	353	33	40	345	161	150	181	176	190	224	240	249	240	260	283	283	298	306	155	156	305	263	0.8	
11	***	152	135	202	202	160	166	145	166	144	184	326	0	195	201	194	170	206	165	95	74	48	54	52	141	1.0	
12	68	74	79	112	104	65	46	37	75	64	24	61	11	213	107	343	220	197	40	53	58	63	68	66	60	1.2	
13	79	71	5	59	32	68	22	40	***	***	***	***	222	253	213	256	231	184	170	256	261	139	152	164	214	0.9	
14	184	197	176	132	***	81	125	261	298	343	335	325	328	350	2	1	359	343	325	311	286	274	294	310	330	1.8	
15	39	115	185	240	190	259	173	45	8A	0	19	10	2	221	266	254	233	230	222	216	213	201	209	182	225	1.3	
16	183	147	145	161	135	146	163	155	183	211	206	206	202	215	209	212	231	237	269	246	238	216	199	208	206	4.7	
17	257	303	284	286	305	309	300	288	304	306	311	315	315	340	329	9	349	24	***	165	170	173	***	209	304	3.7	
18	16	15	340	54	66	132	132	***	321	311	328	325	322	24	43	7	30	193	210	225	216	211	205	168	217	0.5	
19	166	178	167	159	155	176	172	198	161	208	209	206	212	210	216	227	224	207	197	200	169	171	171	174	199	4.8	
20	179	191	150	185	212	184	184	180	208	220	211	199	198	193	207	202	208	229	271	41	173	244	234	270	207	4.8	
21	289	274	262	257	268	298	301	292	304	307	333	346	347	348	37	40	56	28	48	168	222	224	158	267	311	2.1	
22	148	216	98	125	153	161	269	204	105	101	53	41	76	6	76	108	228	221	223	138	174	211	236	207	161	0.9	
23	221	218	235	207	296	321	137	134	121	55	353	332	324	343	143	143	105	104	116	158	169	183	185	195	142	0.8	
24	301	294	296	305	238	156	142	160	192	321	333	337	341	357	358	352	82	330	246	264	213	174	171	183	319	1.6	
25	210	90	142	161	323	130	151	151	155	170	180	241	238	213	192	214	221	201	168	155	196	175	182	188	189	3.0	
26	182	195	198	197	179	153	159	158	177	178	186	189	189	197	182	172	176	186	184	172	169	201	227	211	186	8.9	
27	215	245	218	192	201	176	168	176	180	184	178	174	187	200	201	191	198	212	211	219	290	339	340	321	193	5.8	
28	169	233	103	143	176	221	260	280	299	325	337	337	344	352	352	347	347	340	349	341	326	304	310	305	333	3.7	
29	252	220	216	212	199	215	208	194	206	228	210	225	228	219	208	221	216	195	180	174	184	186	180	145	202	4.6	
30	150	187	201	199	215	289	297	283	259	342	344	39	73	20	5	43	80	148	137	176	168	219	281	293	238	1.4	
31	209	228	233	233	207	204	207	212	210	209	218	211	221	227	216	200	208	197	187	188	181	152	166	188	206	5.0	
VD	175	205	214	196	195	192	192	195	210	224	221	220	226	227	200	208	211	213	208	183	190	207	199	178	207		
VV	0.6	1.1	1.0	1.1	1.2	1.1	1.1	1.3	1.4	1.3	1.1	1.1	1.7	1.8	1.8	2.0	2.5	2.3	1.7	1.2	1.1	1.3	1.0	0.6		1.3	

TOTAL NUMBER OF OBSERVATIONS = 710

NOTE: \*\*\* = MISSING DATA

SIGMA HORIZ. WIND DIR. @10M  
DEGREES

CB-TRACT  
TRAILER AB20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	6	5	4	8	7	7	6	9	5	6	17	13	16	20	10	9	6	6	6	4	4	4	4	4	8	20
2	8	7	6	5	7	6	5	6	4	3	13	10	17	19	18	22	4	7	10	3	4	7	6	5	8	22
3	9	9	(CM)	5	0	(CM)	(CM)	(CM)	(CM)	(CM)	6	11	15	12	18	22	4	7	10	3	4	7	6	21	9	22
4	5	5	5	5	5	7	8	8	9	9	12	12	15	18	18	19	10	4	3	1	(CM)	(CM)	6	(CM)	9	19
5	7	5	5	5	5	4	5	5	5	13	19	21	26	23	26	26	(CM)	(CM)	14	3	5	6	8	8	11	26
6	4	5	10	8	(CM)	(CM)	3	(CM)	(CM)	6	(CM)	10	11	20	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	( )	)	20
7	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	7	4	6	11	8	12	21	9	8	2	6	(CM)	(CM)	(CM)	1	8	21
8	(CM)	4	9	9	5	8	8	8	6	3	5	(CM)	9	11	17	9	12	13	8	(CM)	(CM)	(CM)	(CM)	9	9	17
9	10	7	5	6	10	7	7	5	3	1	8	3	5	5	15	4	7	6	8	5	3	4	7	5	6	15
10	9	9	7	7	(CM)	(CM)	(CM)	(CM)	(CM)	11	5	6	15	15	17	17	4	(MT)	(MT)	5	1	3	4	7	8	17
11	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	(MT)	7	6	5	6	12	6	5	3	4	2	5	7	(CM)	6	12
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	35	18	12	7	(CM)	5	5	5	3	10	( )	35
13	8	6	6	5	5	6	8	5	5	3	14	14	15	16	26	13	20	12	10	19	4	7	9	8	10	26
14	7	9	12	7	7	7	(CM)	6	5	18	13	20	23	23	29	19	24	12	11	6	6	6	8	11	13	29
15	12	8	8	8	5	7	9	8	5	4	19	23	25	22	22	17	16	19	22	4	6	8	9	7	12	25
16	6	5	5	5	4	9	5	5	6	18	18	22	19	21	20	25	19	21	14	13	13	19	10	10	13	25
17	15	10	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(PF)	(PF)	17	8	10	9	12	16	11	(CM)	4	6	9	6	2	(CM)	10	17
18	(CM)	(CM)	(CM)	(CM)	(CM)	13	(CM)	(CM)	(CM)	11	22	22	22	(PF)	(PF)	12	12	19	12	17	9	10	13	11	15	22
19	6	7	5	5	5	7	7	7	13	12	19	20	19	21	22	20	26	21	10	20	7	6	5	7	12	26
20	6	6	7	11	14	4	8	3	19	22	15	22	19	(MT)	(MT)	9	19	11	10	(CM)	(CM)	(CM)	6	(CM)	12	22
21	6	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	8	5	7	11	12	13	17	8	(CM)	(CM)	(CM)	(CM)	(CM)	9	9	8	9	17
22	7	8	6	8	10	6	7	5	3	1	1	12	15	10	18	12	7	6	14	9	7	8	12	6	8	18
23	9	7	9	(CM)	7	6	6	(CM)	1	9	11	17	20	24	12	7	5	5	8	6	9	6	7	12	9	24
24	(CM)	11	6	(CM)	4	6	6	6	6	13	(PF)	13	17	16	24	17	4	7	9	(CM)	5	5	5	7	9	24
25	6	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	5	11	11	26	20	22	15	21	20	12	2	3	5	6	6	13	12	26
26	12	5	6	16	6	6	9	15	17	12	19	13	17	21	18	15	12	16	17	11	13	14	23	17	14	23
27	16	12	(CM)	10	(CM)	(PF)	1	7	12	14	13	17	21	22	20	20	21	15	(CM)	9	9	(CM)	(CM)	(CM)	14	21
28	(CM)	(CM)	(CM)	3	5	(CM)	(CM)	(CM)	(CM)	9	13	14	16	15	15	14	14	12	13	14	(CM)	7	(CM)	8	11	16
29	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
30	12	9	6	7	10	10	13	9	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
31	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	13	20	30	25	22	22	17	23	19	8	8	5	4	6	6	15	30

AV	8	7	7	7	6	7	7	7	8	10	13	15	16	17	18	16	13	11	10	8	6	7	8	9	10	
PK	16	12	12	16	14	13	13	15	19	22	22	30	26	26	35	26	26	21	22	20	13	19	23	21	35	



SIGMA HORIZ. WIND DIR. @ 10M  
DEGREES

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	11	9	12	16	4	(CM)	13	15	11	12	14	19	18	10	26	14	10	9	6	6	7	5	6	4	11	26
2	10	5	6	4	5	9	7	6	6	17	16	11	14	15	10	9	12	8	13	5	16	9	8	8	10	17
3	34	27	23	11	8	21	8	10	7	17	25	24	20	21	14	13	10	9	7	6	7	8	12	8	15	34
4	7	8	9	8	8	8	7	7	9	9	10	10	13	13	16	14	12	8	6	3	2	5	9	11	9	16
5	14	8	22	13	5	8	5	7	11	13	14	13	18	23	22	23	20	8	8	4	10	12	6	9	12	23
6	7	(CM)	7	5	32	10	12	16	19	9	(CM)	10	8	9	11	9	9	9	8	(CM)	6	6	5	5	10	32
7	5	30	13	6	5	6	4	5	10	11	8	9	10	9	9	8	8	7	10	3	5	17	9	3	9	30
8	4	10	7	(CM)	11	7	4	19	38	8	24	27	14	13	13	10	9	8	4	5	10	5	8	6	11	38
9	10	16	6	11	11	6	9	18	11	18	13	20	16	23	21	18	9	9	10	8	4	9	16	26	13	26
10	17	5	6	29	14	21	10	5	10	10	10	16	25	32	13	10	8	6	13	10	5	6	23	11	13	32
11	10	12	10	15	6	9	16	(CM)	12	10	26	17	14	10	10	10	11	10	6	7	14	17	7	6	12	26
12	14	10	8	5	4	7	6	6	14	18	19	30	27	19	19	21	15	20	7	7	6	11	14	14	13	30
13	9	(CM)	9	7	10	19	4	6	(CA)	(CA)	(CA)	(CA)	15	10	16	17	13	17	5	16	8	12	6	16	11	19
14	18	23	10	5	3	18	8	11	21	23	28	23	20	14	23	15	12	7	5	8	5	4	5	17	14	28
15	10	8	8	7	5	5	13	10	21	32	40	29	36	34	24	12	12	9	5	5	21	19	37	6	17	40
16	18	5	6	6	5	6	3	6	21	14	11	13	13	13	13	11	10	11	11	15	14	9	23	15	11	23
17	16	9	8	11	9	9	10	9	8	9	11	11	15	15	14	14	14	14	5	0	0	0	0	0	9	16
18	0	0	0	0	0	0	0	3	11	14	26	26	34	41	33	25	22	9	9	12	5	8	12	10	13	41
19	5	7	6	5	5	11	4	10	23	13	11	11	15	14	14	11	10	10	8	11	15	16	17	10	11	23
20	19	8	11	8	9	6	6	6	11	10	10	12	12	14	12	15	11	12	12	10	7	6	21	10	11	21
21	9	9	9	10	13	18	8	9	9	9	10	11	11	10	8	10	23	14	9	6	10	10	10	9	11	23
22	8	19	5	4	24	12	8	8	12	22	15	40	27	31	13	11	19	10	14	21	11	18	(CM)	11	16	40
23	15	14	14	6	6	10	7	9	24	31	37	25	37	33	17	9	10	8	16	7	10	8	17	17	16	37
24	19	14	7	12	7	5	14	8	15	10	8	9	9	11	11	16	28	17	7	2	6	11	7	20	11	28
25	9	3	4	4	3	4	6	7	12	10	13	16	15	13	14	12	9	12	12	10	13	25	20	40	12	40
26	11	6	6	6	8	8	8	10	20	14	15	16	14	12	10	10	11	8	10	9	12	10	10	8	11	20
27	7	11	12	9	8	7	8	8	8	8	11	10	11	12	13	13	11	10	6	13	12	15	11	4	10	15
28	6	11	9	5	6	8	6	8	9	8	8	9	10	9	9	10	8	8	8	10	7	5	12	7	8	12
29	3	13	17	25	8	13	24	25	20	13	14	13	12	15	15	11	11	11	8	9	8	6	12	17	13	25
30	9	5	6	7	10	11	9	10	10	11	13	15	22	10	9	9	17	7	0	0	0	0	0	0	8	22
31	0	0	0	0	0	0	1	7	9	10	10	12	12	11	13	12	11	10	4	5	4	7	12	21	7	21
AV	11	11	9	9	8	9	8	9	14	14	16	17	17	17	15	13	13	10	8	8	8	10	12	11	12	41
PK	34	30	23	29	32	21	24	25	38	32	40	40	37	41	33	25	28	20	16	21	21	25	37	40		

SIGMA HORIZ. WIND DIR. @ 30M  
DEGREES

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	13	6	15	18	10	17	17	12	23	5	7	9	18	8	19	12	9	10	3	4	4	4	3	3	10	23
2	5	4	5	1	2	4	3	2	3	9	9	6	8	9	5	5	7	6	7	5	9	6	3	5	5	9
3	5	9	0	0	0	0	0	0	0	21	29	19	18	17	13	12	9	8	6	4	6	6	10	8	8	29
4	7	7	8	7	7	7	6	6	8	7	8	8	11	12	15	12	10	6	13	6	2	8	14	8	15	
5	24	9	8	10	4	4	3	3	7	7	7	7	8	18	11	12	9	5	3	3	5	6	3	4	8	24
6	3	18	5	3	(CM)	8	8	7	15	(CM)	(CM)	10	7	8	10	8	4	6	6	8	3	4	4	8	7	18
7	10	21	8	5	2	2	1	2	6	8	6	7	9	8	7	7	8	10	10	2	2	19	20	7	8	21
8	5	6	4	13	12	6	9	17	25	6	18	33	13	11	12	8	7	8	5	8	8	5	6	4	10	33
9	4	16	11	(CM)	(CM)	8	12	8	17	17	12	18	13	16	23	18	8	8	8	5	4	8	24	(CM)	12	24
10	15	7	4	18	10	7	11	5	9	9	8	15	22	23	14	10	8	5	9	11	(CM)	15	19	(CM)	12	23
11	13	8	(CM)	(CM)	10	10	25	19	16	11	25	17	17	9	9	9	10	8	5	5	20	15	10	9	13	25
12	9	7	7	3	2	6	5	4	9	8	9	16	26	15	(CM)	12	14	22	8	4	3	9	10	14	10	26
13	6	18	14	11	6	13	5	7	(CA)	(CA)	(CA)	(CA)	7	5	13	14	12	17	5	18	12	6	7	8	10	18
14	15	28	18	18	15	17	10	14	22	19	24	19	20	12	19	13	10	5	4	8	7	6	8	14	14	28
15	12	5	8	19	7	24	9	17	16	29	36	25	30	31	21	11	11	7	4	2	31	23	43	9	18	43
16	24	5	4	7	4	4	2	6	18	13	11	12	11	12	12	9	8	9	10	10	15	7	12	2	9	24
17	9	8	6	8	4	3	0	2	4	8	9	10	13	13	13	13	11	8	(CM)	7	(CM)	14	(CM)	(CM)	8	14
18	10	8	12	9	5	3	6	17	10	13	30	27	28	32	31	26	20	9	11	15	4	6	11	15	15	32
19	6	9	9	6	5	11	9	10	26	12	9	10	13	13	13	10	9	9	8	10	15	16	19	9	11	26
20	20	8	12	5	9	6	6	6	10	9	8	12	12	13	12	14	10	11	9	9	6	4	9	8	10	20
21	8	8	7	8	20	17	9	8	7	7	8	9	9	8	8	9	16	14	13	4	10	13	8	8	10	20
22	6	12	5	3	25	16	6	10	10	19	14	19	22	26	12	9	17	10	15	18	20	28	28	20	15	28
23	17	15	(CM)	11	13	10	5	7	20	22	35	21	33	32	15	7	7	7	13	10	11	20	44	19	17	44
24	33	14	8	9	7	4	4	6	16	9	7	9	8	10	10	14	32	19	8	4	4	7	4	13	11	33
25	28	6	3	6	11	7	6	7	12	8	11	14	14	12	13	10	8	12	12	8	16	26	23	44	13	44
26	10	5	5	5	6	7	7	9	18	13	15	15	13	10	9	9	11	8	10	9	11	9	8	7	10	18
27	6	9	10	8	7	6	7	7	7	8	10	9	11	11	13	12	10	9	5	10	20	14	8	11	10	20
28	9	11	12	4	4	6	5	7	7	8	8	8	8	7	7	8	6	7	6	9	6	5	7	11	7	12
29	5	6	10	14	8	14	30	28	29	12	13	11	11	14	13	9	9	10	7	8	8	6	12	17	13	30
30	8	6	6	7	10	10	7	9	9	10	10	12	17	5	0	5	13	0	0	0	0	0	0	0	6	17
31	0	0	0	0	0	0	0	7	8	9	10	12	10	10	12	11	10	10	3	4	4	6	12	19	7	19
AV	11	10	8	8	8	8	8	9	13	12	14	14	15	14	13	11	11	9	8	7	9	10	13	11	10	44
PK	33	28	18	19	25	24	30	28	29	29	36	33	33	32	31	26	32	22	15	18	31	28	44	44		



SIGMA HORIZ. WIND DIR. @ 60M  
DEGREES

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	10	7	18	25	8	14	8	11	21	7	12	16	19	8	17	12	9	7	4	5	4	5	5	3	11	25
2	5	7	3	2	2	4	2	3	4	14	13	8	12	12	12	12	9	7	7	6	8	5	9	7	7	14
3	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	11	20
4	6	7	7	7	6	6	6	5	7	6	7	8	10	11	14	11	9	5	5	18	2	12	22	9	9	22
5	21	16	8	24	22	8	6	4	9	11	12	10	15	22	21	19	17	7	4	4	8	15	5	3	12	24
6	2	(CM)	6	4	(CM)	6	9	8	5	32	(CM)	9	6	8	9	8	7	8	7	12	12	4	2	3	8	32
7	3	18	22	10	5	4	2	2	10	9	5	7	8	7	6	7	7	16	17	4	4	15	11	7	9	22
8	8	14	3	10	19	9	14	29	27	7	(CM)	28	12	10	12	8	7	8	5	6	12	4	7	5	11	29
9	6	23	(CM)	(CM)	11	7	8	4	6	18	11	18	11	17	23	14	7	7	6	3	4	7	9	18	11	23
10	33	9	6	9	8	6	17	7	6	8	7	13	23	24	12	10	8	4	5	8	9	7	13	6	11	33
11	(CM)	11	12	16	10	5	6	18	12	10	32	26	24	10	8	8	9	6	4	4	10	16	6	6	12	32
12	13	11	8	4	5	8	8	4	20	14	15	26	27	16	19	15	13	20	6	3	7	13	8	8	12	27
13	11	19	27	15	24	19	7	11	(CA)	(CA)	(CA)	13	9	9	9	11	12	21	5	10	11	14	6	5	13	27
14	7	16	10	13	(CM)	7	5	22	27	23	20	17	20	11	17	12	10	4	3	5	4	6	8	10	12	27
15	10	7	7	9	9	10	7	6	17	43	36	25	28	33	19	10	10	7	4	3	31	28	17	10	16	43
16	18	11	5	7	5	5	2	4	13	13	9	11	10	11	10	8	7	8	8	18	10	6	23	14	10	23
17	11	6	6	8	6	6	8	6	6	7	8	9	11	12	11	12	9	8	(CM)	5	14	12	(CM)	11	9	14
18	7	8	12	8	5	3	4	(CM)	10	11	33	29	23	29	33	37	22	9	13	22	3	3	7	16	15	37
19	7	10	8	5	7	8	9	7	26	10	7	9	12	11	12	10	8	8	7	8	14	12	20	8	10	26
20	15	7	13	4	8	6	5	6	9	8	8	11	11	12	11	13	9	10	9	8	6	5	4	7	9	15
21	8	7	6	8	14	12	8	8	8	7	7	7	8	7	7	8	16	12	16	7	9	8	12	10	9	16
22	6	18	7	2	20	8	5	14	10	21	14	27	23	27	11	8	16	10	15	44	28	16	17	12	16	44
23	11	9	15	20	10	11	5	6	15	22	28	20	32	26	13	7	7	5	7	5	6	10	34	13	14	34
24	18	14	7	7	5	4	3	4	15	10	6	8	7	9	10	11	31	18	12	3	6	6	2	8	9	31
25	15	7	4	9	24	8	6	7	11	7	11	14	13	10	11	8	7	12	10	7	18	20	21	46	13	46
26	8	3	4	4	4	6	5	8	16	11	12	13	11	9	8	8	9	8	8	8	11	8	7	5	8	16
27	4	8	8	7	6	5	6	6	6	7	9	7	10	10	12	11	9	7	4	8	14	14	7	15	8	15
28	6	10	7	4	3	4	5	6	6	6	7	6	8	6	6	6	5	7	5	7	4	4	6	11	6	11
29	7	3	5	6	6	8	21	25	30	11	12	10	9	13	12	8	8	9	6	7	7	4	10	17	11	30
30	8	5	5	6	9	9	6	10	9	9	10	12	7	8	7	11	14	9	8	5	3	15	6	10	8	15
31	17	8	3	3	5	3	3	4	7	9	10	11	10	8	10	11	9	9	3	4	4	6	12	14	8	17
AV	10	10	9	9	10	7	7	9	13	13	14	15	14	14	13	11	11	9	7	9	9	10	11	11	11	46
PK	33	23	27	25	24	19	21	29	30	43	36	29	32	33	33	37	31	21	17	44	31	28	34	46		

TEMPERATURE  
DEGREE C

CB-TRACT  
TRAILER AB20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
2	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
3	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
4	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
5	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
6	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
7	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
8	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
9	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
11	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
13	4	5	2	1	1	1	1	-2	1	6	8	9	9	6	6	4	7	8	12	9	7	7	6	4	( )	12
14	1	1	-1	0	-1	-1	-1	-1	1	7	6	7	9	8	9	8	9	8	7	3	4	2	1	1	( )	9
15	1	0	-1	0	-2	-2	-1	-1	2	8	12	13	12	12	11	11	10	11	8	6	4	3	2	1	( )	9
16	-1	-2	-2	-2	-2	-1	-2	-1	3	8	8	8	8	8	8	8	8	8	5	1	2	2	3	1	( )	13
17	2	-2	-2	-1	1	1	-2	-2	(PF)	(PF)	-1	-1	-1	2	1	2	3	4	3	0	1	0	-1	1	( )	8
18	2	1	0	1	1	-2	-3	-3	1	-1	2	4	4	(PF)	(PF)	7	7	6	5	2	1	-1	-1	-2	( )	4
19	-3	-3	-3	-3	-2	-2	-2	-2	3	6	7	6	8	9	9	9	8	7	7	8	7	7	7	7	( )	9
20	5	4	3	3	3	4	4	5	6	3	4	4	4	(MT)	(MT)	(MT)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	6
21	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
22	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
23	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
24	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
25	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
26	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
27	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
28	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
29	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
30	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
31	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )

AV	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
PK	5	5	3	3	3	4	4	5	6	8	12	13	12	12	11	11	10	11	12	9	7	7	7	7	7	13
MN	-3	-3	-3	-3	-2	-2	-3	-3	1	-1	-1	-1	-1	2	1	2	3	4	3	0	1	-1	-1	-2	-2	( )

MONTHLY MINIMUM = -3

TEMPERATURE @ 10M  
DEGREE C

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	1	1	1	0	0	-1	0	-1	1	3	5	6	6	3	4	3	3	3	1	1	0	1	0	0	2	6
2	0	-1	-1	-1	-1	-1	-1	-1	-4	3	5	3	4	6	4	1	-1	-1	0	-1	-1	-1	-1	-2	1	6
3	-2	-2	-3	-2	-3	-3	-5	-3	-2	-1	-1	-1	0	1	2	3	2	2	1	1	0	-2	-2	-2	-1	3
4	-2	-2	-3	-3	-3	-3	-3	-3	-2	-1	0	1	2	2	3	3	3	3	3	2	1	-1	-1	-2	0	3
5	-2	-1	-1	-1	-1	-2	-2	-2	0	3	-1	-1	0	5	6	-2	6	5	-2	2	2	2	2	1	1	6
6	-2	-1	-1	-1	-1	-3	-3	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	-1	-1
7	-4	-5	-4	-4	-6	-6	-5	-6	-4	-3	-1	1	1	2	2	2	4	0	-1	-1	-2	-3	-3	-4	-2	-2
8	-6	-6	-6	-5	-6	-6	-5	-6	-4	-2	-1	2	3	4	4	4	4	3	2	-1	-2	-2	-2	-4	-2	-2
9	-2	-2	-2	-2	-2	-2	-3	-4	-2	-1	0	3	4	5	4	4	4	4	2	2	2	1	-1	-1	-1	4
10	-2	-3	-2	-3	-3	-4	-4	-4	-3	-2	-1	1	3	3	3	3	3	3	3	2	1	1	1	1	0	5
11	1	1	1	1	0	-1	-1	0	1	1	2	2	3	3	3	4	5	4	3	1	2	2	1	-1	1	3
12	-1	-2	-2	-2	-3	-2	-2	-2	-1	(CA)	(CA)	(CA)	5	4	3	4	7	6	3	2	2	1	1	0	1	5
13	-1	-1	-1	-2	-2	-3	-3	-3	-1	1	3	5	6	6	6	7	7	6	5	3	2	2	2	2	2	7
14	1	1	1	-2	-1	-1	-2	-2	1	4	5	6	7	7	8	7	7	7	4	3	3	2	2	2	2	8
15	1	0	0	1	0	0	0	-2	3	6	6	-3	-2	-2	-2	-1	-2	-2	-2	-3	0	0	-1	0	3	7
16	1	-2	-4	-3	-5	-6	-5	-6	-5	-4	-4	-3	-2	0	8	8	7	6	4	3	2	2	-4	-4	3	8
17	-1	-4	-1	-1	-2	-4	-5	-6	-6	-5	-4	-3	-2	0	4	4	4	4	3	2	2	2	-4	-4	3	5
18	-2	-4	-1	-3	-3	-4	-4	-6	-5	-4	-4	-3	-2	0	8	8	7	6	4	3	2	2	-4	-4	3	8
19	-2	-4	-1	-3	-3	-4	-4	-6	-5	-4	-4	-3	-2	0	4	4	4	4	3	2	2	2	-4	-4	3	5
20	4	4	4	4	5	5	4	5	2	2	2	3	4	4	4	5	6	7	6	4	3	3	2	2	2	7
21	-1	-2	-3	-3	-3	-4	-4	-5	-2	-2	-1	-3	-2	0	4	4	4	4	3	2	2	2	-4	-4	3	8
22	-3	-3	-4	-2	-3	-3	-4	-3	-1	3	4	5	6	6	6	7	7	6	4	3	2	2	-4	-4	3	5
23	3	3	3	3	2	1	1	2	4	5	6	7	7	8	7	7	6	7	6	4	3	3	2	2	2	7
24	2	2	1	1	-1	-1	-1	-3	-2	-2	-1	0	1	1	0	0	0	0	-2	-1	0	0	-1	0	0	8
25	-2	-2	-2	-2	-2	-2	-3	-3	-1	3	4	4	5	6	6	7	7	6	4	3	2	2	-4	-4	3	5
26	7	7	7	7	6	6	6	8	9	10	11	12	13	13	12	12	12	12	10	8	8	7	6	2	2	9
27	1	-1	-1	-1	-1	-2	-2	-2	-2	-1	0	1	1	2	3	3	3	2	1	-1	-1	-1	-2	-2	0	13
28	-2	-3	-3	-3	-3	-3	-3	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	-2	-2	-3	-4	-4	-4	-2	3
29	-4	-4	-4	-3	-3	-2	-2	-2	1	2	3	4	4	4	5	6	6	6	4	3	3	4	4	4	2	6
30	3	4	4	4	4	2	-1	-1	-1	-3	-3	-4	-4	-4	-5	-4	-4	-4	-4	-5	-6	-7	-7	-7	-2	4
31	-6	-7	-8	-8	-8	-8	-7	-6	-4	-2	-2	-1	1	1	2	2	2	2	1	0	-1	-1	-1	-1	-2	2
AV	-1	-1	-1	-1	-2	-2	-2	-2	-1	1	2	2	3	3	3	3	3	3	2	1	1	0	0	-1	1	13
PK	7	7	7	7	6	6	6	8	9	10	11	12	13	13	12	12	12	12	10	8	8	7	6	6	6	7
MN	-6	-7	-8	-8	-8	-8	-7	-6	-6	-5	-4	-4	-4	-4	-5	-4	-4	-4	-4	-5	-6	-7	-7	-7	-7	7

MONTHLY MINIMUM = -8



TEMPERATURE @ 30M  
DEGREE C

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	1	1	1	1	1	1	1	1	1	3	4	5	5	3	3	3	3	2	1	1	1	1	1	1	2	5
2	0	-1	-1	0	1	0	0	0	1	3	4	2	3	6	4	1	-1	-1	0	0	-1	-1	-1	-1	1	6
3	-2	-3	-3	-3	-2	-3	-4	-4	-2	-3	-1	-1	0	1	1	2	2	3	3	1	3	2	2	0	-1	2
4	-1	-1	-1	-2	-2	-2	-2	-3	-1	2	3	3	4	2	5	5	5	4	3	3	2	2	1	1	0	3
5	1	0	0	0	-1	-1	-1	-1	-2	-2	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	1	5
6	-2	-4	-3	-4	-5	-4	-4	-4	-4	-3	-1	0	1	2	2	2	2	0	-1	-1	-2	-2	-3	-4	-1	1
7	-3	-5	-4	-4	-5	-4	-4	-4	-4	-2	0	2	3	3	3	4	4	3	3	2	2	1	0	0	-1	4
8	-6	-2	-1	-1	-1	-2	-3	-3	-3	-1	1	2	4	4	4	4	4	4	3	3	2	1	1	1	1	4
9	-2	-2	-2	-2	-2	-3	-4	-4	-3	-2	-1	1	2	3	3	3	3	3	3	3	2	1	1	1	0	4
10	-1	1	1	1	0	0	0	0	0	1	2	2	3	3	3	3	4	4	3	3	2	2	1	1	2	4
11	0	-1	-1	-1	-1	-2	-2	-2	-1	1	3	4	6	6	6	6	6	6	5	4	3	3	3	2	1	6
12	0	-1	-1	-1	-1	-2	-2	-3	-1	3	5	6	7	7	7	7	7	6	5	4	3	3	2	2	2	7
13	0	-1	-1	-1	-2	-2	-2	-2	-1	1	6	6	7	7	7	7	7	6	4	3	3	3	2	1	3	7
14	0	-1	-1	-1	-1	-2	-2	-3	-1	1	3	4	6	6	6	6	6	6	5	4	3	3	3	2	2	6
15	2	1	2	0	0	0	1	1	1	3	5	6	7	7	7	7	7	7	6	5	4	3	3	2	2	7
16	2	1	1	1	1	1	1	1	3	5	6	6	7	7	7	7	7	6	4	3	3	3	3	2	1	7
17	-1	-2	-3	-3	-3	-4	-5	-6	-5	-6	-4	-3	-2	-2	-2	-2	-2	-2	-2	-2	-3	-3	-3	-4	-3	-1
18	-4	-4	-5	-5	-6	-6	-6	-6	-5	-4	-3	-2	-2	-1	1	1	1	1	1	1	0	-1	-1	-2	-2	1
19	-2	-1	-1	-1	-1	-2	-2	-2	-2	3	4	4	6	7	8	8	7	4	4	4	4	4	5	4	-2	8
20	4	4	4	5	6	6	5	5	2	2	2	3	3	3	3	3	3	2	0	-1	0	-1	-2	-2	3	6
21	-1	-3	-3	-3	-3	-3	-3	-3	-2	-2	-1	-1	0	1	0	0	0	6	4	4	3	3	4	4	1	1
22	-2	-2	-3	-2	-2	-2	-3	-2	-1	3	6	7	7	7	6	6	6	7	6	2	2	4	4	4	5	7
23	3	3	3	3	3	2	2	2	4	5	6	7	7	7	6	5	6	7	6	6	6	4	4	4	2	6
24	3	3	3	1	-1	-1	-1	0	1	1	1	-1	-1	1	2	1	1	2	2	2	2	1	1	1	1	3
25	-1	-1	-1	-1	-1	-1	-2	-1	2	4	6	7	7	8	8	9	8	8	8	7	7	6	6	6	4	9
26	7	7	7	7	7	6	6	7	9	10	11	11	12	13	12	12	12	11	10	7	8	7	5	2	8	13
27	1	-1	-1	-1	-1	-2	-2	-2	-2	-1	-1	0	1	2	2	3	3	2	1	0	-1	-1	-2	-2	0	3
28	-2	-3	-3	-3	-3	-3	-3	-3	-2	-3	-2	-2	-2	-1	-2	-1	-1	-2	-2	-2	-3	-3	-4	-4	-2	-1
29	-3	-3	-3	-3	-3	-2	-2	-2	1	2	2	3	4	4	4	5	5	5	4	3	3	4	4	4	2	5
30	3	4	4	4	4	2	-1	-1	-2	-3	-4	-4	-4	-4	-5	-4	-4	-4	-4	-5	-6	-6	-6	-6	-2	4
31	-6	-6	-7	-7	-7	-6	-7	-6	-4	-3	-2	-1	0	1	1	2	2	2	1	1	1	-1	0	0	-2	2
AV	0	-1	-1	-1	-1	-1	-2	-2	-1	0	1	2	3	3	3	3	3	3	2	1	1	1	0	0	1	
PK	7	7	7	7	7	6	6	7	9	10	11	11	12	13	12	12	12	11	10	7	8	7	6	6	1	13
MN	-6	-6	-7	-7	-7	-6	-7	-6	-6	-6	-4	-4	-4	-4	-5	-4	-4	-4	-4	-5	-6	-6	-6	-6	-6	

MONTHLY MINIMUM = -7

TEMPERATURE @ 60M  
DEGREE C

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	2	2	2	2	2	1	1	1	2	3	4	5	5	3	3	3	2	2	1	2	1	1	1	1	2	5
2	1	-1	-2	-2	-2	-2	-3	-3	-4	-2	-2	-1	0	1	1	2	2	1	1	0	-1	-1	-1	-1	1	5
3	-2	-3	-3	-3	-3	-3	-2	-2	-1	-2	-1	0	1	1	2	2	2	3	3	2	2	2	2	0	0	2
4	-3	-3	-1	-1	-2	-1	-1	-1	-1	-2	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	1	3
5	-1	0	1	1	0	-1	-1	-1	-2	-2	-1	-1	-1	-2	-2	-1	-1	-1	-1	-1	-2	-2	-2	-2	2	5
6	2	-2	-2	-2	-2	-4	-3	-4	-3	-1	0	1	1	2	2	2	2	2	2	0	1	1	1	1	2	5
7	-2	-2	-3	-3	-4	-4	-4	-4	-3	-1	1	2	3	4	4	4	4	3	3	3	2	1	1	1	0	4
8	-4	-4	-4	-4	-4	-4	-4	-4	-3	-2	-1	1	1	2	3	3	3	3	3	3	2	1	1	1	0	4
9	-1	-1	-1	-1	-1	-1	-1	0	-3	-2	-1	1	2	3	3	3	3	3	3	3	2	1	1	1	0	4
10	0	-2	-2	-2	-2	-3	-3	-3	-3	-2	-1	1	3	4	4	4	4	4	4	4	2	1	1	1	0	4
11	1	1	1	0	0	-1	-1	-1	0	1	1	2	3	3	3	3	3	3	3	3	2	1	1	1	0	4
12	1	0	-1	-1	-1	-1	-1	-1	0	1	3	4	4	4	-16	-4	6	6	6	5	4	2	2	2	0	4
13	0	-1	-1	-1	-1	-1	-1	-1	0	1	3	6	7	7	6	6	6	6	6	4	4	2	2	2	2	6
14	1	0	0	-1	-1	-2	-2	-2	-1	1	3	6	7	7	7	7	7	7	7	6	4	3	3	3	2	7
15	2	2	2	2	1	2	1	1	3	4	5	6	6	7	7	7	7	7	7	6	4	3	3	3	2	7
16	1	-2	-3	-6	-3	-4	-6	-6	-5	-4	-4	-3	-2	-2	-2	-2	-2	-2	-2	-2	-3	-4	0	0	3	
17	1	-4	-5	-1	-1	-1	-1	-1	-2	-2	2	3	4	5	5	4	4	4	4	4	0	-1	-1	-1	-3	1
18	-4	-1	-1	-1	-1	-1	-1	-1	-5	-4	-3	4	4	3	3	3	3	3	3	4	4	4	4	4	3	6
19	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	2	3	4	5	5	4	4	4	4	4	0	0	0	-2	-1	6
20	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	2	3	4	5	5	4	4	4	4	4	0	0	0	-2	-1	6
21	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	2	3	4	5	5	4	4	4	4	4	0	0	0	-2	-1	6
22	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	2	3	4	5	5	4	4	4	4	4	0	0	0	-2	-1	6
23	3	3	3	3	3	2	2	2	3	4	6	6	6	7	7	7	7	7	7	6	6	5	4	4	5	7
24	4	3	2	1	0	-1	0	1	2	3	4	4	4	5	5	4	4	4	4	4	2	2	2	2	4	8
25	0	-1	0	0	0	-1	-1	0	2	4	6	7	7	8	8	8	8	8	7	7	7	6	6	6	1	4
26	7	7	7	7	7	6	7	7	9	9	10	11	12	13	12	12	12	11	10	10	8	7	6	6	2	8
27	1	-1	-1	-1	-2	-2	-2	-2	-2	0	1	1	1	1	1	2	2	2	1	1	1	1	1	1	0	3
28	-2	-3	-3	-3	-3	-3	-3	-3	-2	-3	-2	-2	-1	-1	-1	-1	-1	-2	-2	-3	-3	-1	-2	-2	-2	0
29	-3	-3	-3	-3	-2	-2	-2	-2	1	2	3	4	3	4	4	4	5	5	4	3	3	4	4	4	-2	-1
30	4	4	4	4	4	2	-1	-2	-2	-3	-4	-4	-4	-4	-5	-4	-4	-4	-4	-5	-5	-6	-6	-6	-2	5
31	-6	-6	-6	-6	-6	-6	-6	-5	-3	-2	-2	-1	1	1	2	2	2	2	1	1	1	0	0	0	-2	2
AV	0	0	-1	-1	-1	-1	-2	-1	-1	0	1	2	3	3	2	3	3	3	2	2	1	1	0	0	1	13
PK	7	7	7	7	7	6	7	7	9	9	10	11	12	13	12	12	12	11	10	7	8	7	6	6	6	6
MN	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-4	-4	-4	-4	-16	-4	-4	-4	-4	-5	-5	-6	-6	-6	-6	-6

MONTHLY MINIMUM = -16



C-B TRACT  
MRI AD42  
March, 1981

TEMPERATURE @10M

DATA NOT AVAILABLE AT REPORT TIME

TEMPERATURE @10M

C-B TRACT  
MRI AD56  
March 1981

DATA NOT AVAILABLE AT REPORT TIME

DELTA TEMPERATURE 60-10M  
DEGREE C\*100

CB-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	39	94	83	89	117	78	83	89	-6	-72	-83	-89	-83	-78	-83	-89	-78	-72	-6	56	33	-11	17	0	1
2	22	22	17	56	89	6	17	44	-11	-72	-100	-106	-100	-100	-89	-61	-67	-39	-33	-6	-28	-33	17	17	-22
3	-11	0	-17	-6	61	89	111	89	56	-28	-67	-72	-61	-78	-78	-72	-78	-67	-56	-50	-56	-67	-61	-67	-24
4	-67	-61	-61	-61	-61	-61	-61	-61	-61	-111	-156	-89	-89	-89	-94	-83	-78	-56	-17	17	67	206	122	117	-37
5	78	128	156	133	106	56	111	78	-78	-83	-94	-83	-89	-89	-89	-89	-72	-56	-11	56	50	56	39	-6	9
6	94	67	67	61	56	61	0	72	50	-61	-67	-78	-83	178	-133	228	-111	222	94	-39	-28	-6	0	-6	27
7	-11	-33	-6	6	6	0	-17	-6	-44	-56	-56	-56	-61	-61	-67	-72	-72	-67	-39	17	50	33	11	28	-24
8	56	117	39	100	156	122	144	194	144	100	-22	-44	-44	-33	-39	-50	-56	-44	-33	-11	-28	-17	39	17	34
9	44	100	94	22	89	106	50	117	39	-6	-33	-33	-33	-33	-56	-56	-67	-50	-22	17	83	94	167	133	32
10	72	111	56	72	78	67	94	106	-39	-67	-67	-61	-50	-50	-61	-56	-44	-33	22	28	6	44	89	56	16
11	117	133	56	33	50	78	44	-11	-72	-72	-72	-33	-61	-67	-72	-72	-67	-56	-6	28	44	-22	-39	-50	-8
12	-56	-56	-44	-39	-17	-28	-22	-33	-72	-89	-72	-72	-72	-78	-72	-72	-67	-56	-28	106	61	22	100	106	-27
13	100	67	106	133	128	89	94	94	(CA)	(CA)	(CA)	(CA)	-78	-94	-745	-328	-83	-67	-22	39	-6	-6	28	78	-24
14	133	78	106	72	72	94	56	50	-61	-72	-83	-100	-106	-83	-89	-72	-78	-44	-22	39	67	17	39	22	1
15	17	6	67	150	28	67	94	111	-39	-67	-67	-72	-89	-72	-78	-78	-78	-67	6	206	161	122	106	89	22
16	61	128	122	50	67	100	67	11	-44	-89	-100	-106	-106	-106	-89	-72	-72	-67	-50	-28	-72	-33	6	-22	-19
17	189	-28	-72	-56	-56	-56	-56	-78	-67	-67	-83	-78	-72	-78	-78	-72	-78	-67	-56	44	50	39	33	-17	-36
18	-28	-50	-61	-72	-61	-50	0	44	-67	-83	-78	-72	-78	-67	-78	-78	-83	-72	-44	50	67	72	50	61	-32
19	50	39	6	-6	22	11	61	17	-72	-83	-94	-83	-94	-94	-89	-78	-72	-67	-50	-44	-50	-39	-39	-39	-37
20	-50	-39	-22	67	-22	-17	0	-6	-83	-94	-106	-111	-106	-111	-100	-161	-61	-44	-39	6	44	78	33	-11	-40
21	-56	-67	-67	-67	-56	-56	-61	-67	-72	-72	-72	-78	-83	-83	-78	-78	-78	-67	-50	17	117	78	61	150	-37
22	122	189	189	117	100	117	61	17	-33	-61	-67	-67	-67	-72	-72	-78	-72	-67	39	39	33	56	61	56	22
23	44	50	0	0	28	89	28	-33	-61	-67	-78	-94	-83	-89	-83	-78	-61	-56	-22	39	89	106	106	117	-5
24	172	133	28	-39	-44	-22	11	-6	-61	-244	-39	-67	-83	-78	-72	-83	-72	-72	-44	61	111	172	189	83	-3
25	128	133	156	161	183	156	189	89	-61	-83	-83	-89	-100	-94	-94	-83	-67	-56	-50	-28	-22	-39	-22	0	9
26	-22	33	17	33	22	44	61	-67	-67	-94	-106	-106	-144	-128	-139	-83	-67	-56	-44	-44	-56	6	-72	-78	-48
27	-56	-139	-56	-56	-50	-39	-50	-33	-39	-44	-67	-100	-72	-83	-94	-100	-100	-89	-28	33	-17	0	-17	-11	-54
28	-39	-17	-28	-50	-56	-44	-44	-72	-72	-83	-22	-78	-33	28	-33	-67	-50	-72	-56	-61	-33	-6	6	0	-41
29	56	72	83	17	28	50	11	-33	-28	-44	-50	-56	-94	-94	-89	-106	-89	-78	-33	-17	17	17	-39	-22	-22
30	6	17	6	-11	-33	-133	-161	-189	-56	-78	-72	-50	-39	-200	100	-50	-50	-61	-56	-22	39	78	61	17	-39
31	-17	122	178	189	144	183	106	6	-39	-44	-50	-44	-50	-50	-50	-56	-67	-56	6	61	89	50	-6	0	25
AV	38	44	39	35	38	37	33	17	-37	-70	-74	-76	-78	-72	-96	-76	-72	-52	-24	20	28	34	35	26	-12
PK	189	189	189	189	183	183	189	194	144	100	-22	-33	-33	178	100	228	-44	222	94	206	161	206	189	150	228
MN	-67	-139	-72	-72	-61	-133	-161	-189	-83	-244	-156	-111	-144	-200	-745	-328	-111	-89	-56	-61	-72	-67	-72	-78	

MONTHLY MINIMUM = -745

RELATIVE HUMIDITY @ 3M  
PERCENT

CR-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	74	76	76	78	80	82	83	83	84	84	68	50	45	38	46	64	58	63	66	85	92	89	89	89	73	92
2	91	91	91	95	94	93	91	89	89	87	76	51	55	71	55	50	90	99	99	99	99	90	90	91	84	99
3	93	93	93	93	93	94	94	94	94	95	96	94	78	68	64	59	53	48	50	59	63	65	70	92	79	96
4	96	97	97	97	97	97	97	97	97	97	96	86	75	73	63	59	52	47	47	52	59	74	78	80	80	97
5	82	82	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	(RF)	51	44	45	40	37	38	38	37	44	54	65	70	71	( )	82
6	72	75	79	80	83	87	88	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	88
7	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
8	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
9	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
11	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
14	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
15	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
16	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
17	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
18	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
19	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
20	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
21	68	76	82	82	82	82	80	79	77	73	71	70	65	59	55	70	61	70	68	68	72	73	72	71	( )	73
22	80	80	80	80	80	80	80	81	81	70	56	54	52	50	49	50	52	47	48	53	58	60	63	81	75	82
23	64	60	59	59	58	61	61	61	55	50	48	46	46	46	47	50	56	49	49	53	61	62	62	63	65	81
24	66	67	66	66	80	81	81	82	80	79	83	84	83	82	78	73	82	68	67	73	80	80	79	79	77	84
25	79	79	79	79	78	77	76	76	74	55	50	45	44	44	44	44	44	44	44	45	46	46	46	46	58	79
26	46	45	44	44	45	45	45	48	46	45	44	44	44	44	44	44	44	44	44	45	61	56	69	65	49	69
27	77	80	82	83	82	81	80	78	72	69	66	60	59	59	57	53	52	50	51	58	65	67	72	75	68	83
28	77	81	81	82	83	84	84	84	84	83	82	82	79	78	77	76	76	76	76	76	80	81	84	84	80	84
29	84	83	84	84	84	84	83	81	79	61	59	59	56	57	57	55	53	54	54	57	60	63	60	59	67	84
30	60	61	60	59	59	59	82	85	85	84	83	81	79	78	77	79	79	75	74	74	76	76	77	78	74	85
31	78	78	77	(RF)	(RF)	(RF)	(RF)	(RF)	71	65	60	60	58	58	56	55	54	54	54	59	62	61	62	62	62	78

MONTHLY MINIMUM = 37

AV	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
PK	96	97	97	97	97	97	97	97	97	97	96	94	83	82	78	79	90	99	99	99	97	90	90	92	( )	99
MN	46	45	44	44	45	45	45	48	46	45	44	44	44	38	40	37	38	38	37	44	46	46	46	46	( )	( )



SOLAR RADIATION  
LANGLEY

CB-TRACT  
TRAILER AB23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL	PEAK
1	0	0	0	0	0	0	0	6	16	37	38	56	33	11	48	17	10	5	0	0	0	0	0	0	277	56
2	0	0	0	0	0	0	0	4	9	35	37	23	49	31	10	4	2	1	0	0	0	0	0	0	203	49
3	0	0	0	0	0	0	0	4	7	16	18	20	22	26	35	35	13	2	0	0	0	0	0	0	199	35
4	0	0	0	0	0	0	0	4	16	34	50	41	47	35	29	27	15	2	0	0	0	0	0	0	301	50
5	0	0	0	0	0	0	1	13	30	40	49	46	61	55	38	27	14	3	0	0	0	0	0	0	377	61
6	0	0	0	0	0	0	0	4	7	10	7	16	7	7	2	2	1	0	0	0	0	0	0	0	62	16
7	0	0	0	0	0	0	0	2	4	4	10	10	13	14	10	7	5	2	0	0	0	0	0	0	80	14
8	0	0	0	0	0	0	0	4	10	11	17	25	34	61	44	35	16	2	0	0	0	0	0	0	260	61
9	0	0	0	0	0	0	1	14	25	43	65	71	64	50	40	40	23	7	0	0	0	0	0	0	443	71
10	0	0	0	0	0	0	1	11	36	52	52	59	66	59	16	12	8	2	0	0	0	0	0	0	374	66
11	0	0	0	0	0	0	2	18	16	19	27	22	17	25	34	24	8	5	0	0	0	0	0	0	217	34
12	0	0	0	0	0	0	1	3	11	18	28	24	21	24	31	29	8	8	0	0	0	0	0	0	206	31
13	0	0	0	0	0	0	2	15	32	24	22	31	44	34	39	22	23	11	0	0	0	0	0	0	298	44
14	0	0	0	0	0	0	1	14	35	46	50	63	64	52	46	36	25	5	0	0	0	0	0	0	436	64
15	0	0	0	0	0	0	2	17	32	44	56	62	65	66	37	11	22	6	0	0	0	0	0	0	421	66
16	0	0	0	0	0	0	2	13	26	41	53	61	47	39	23	11	8	2	0	0	0	0	0	0	328	61
17	0	0	0	0	0	0	1	3	10	28	35	53	44	39	30	23	11	6	0	0	0	0	0	0	283	53
18	0	0	0	0	0	0	1	9	16	22	25	41	37	63	31	18	13	7	0	0	0	0	0	0	282	63
19	0	0	0	0	0	0	1	8	19	38	49	24	53	65	43	15	8	3	0	0	0	0	0	0	326	65
20	0	0	0	0	0	0	1	5	10	15	29	34	26	55	17	32	4	5	0	0	0	0	0	0	233	55
21	0	0	0	0	0	0	1	3	5	10	10	27	16	17	13	11	7	5	0	0	0	0	0	0	125	27
22	0	0	0	0	0	0	1	8	38	46	23	21	25	19	20	23	24	9	0	0	0	0	0	0	257	46
23	0	0	0	0	0	0	2	17	33	47	57	61	22	30	22	13	17	6	0	0	0	0	0	0	328	61
24	0	0	0	0	0	0	1	8	9	7	13	17	27	48	40	22	29	9	0	0	0	0	0	0	230	48
25	0	0	0	0	0	0	7	29	40	49	60	66	67	62	47	21	10	4	0	0	0	0	0	0	461	67
26	0	0	0	0	0	0	2	18	30	41	42	47	71	66	41	13	10	4	0	0	0	0	0	0	386	71
27	0	0	0	0	0	0	0	3	7	37	63	47	44	38	46	37	25	10	0	0	0	0	0	0	357	63
28	0	0	0	0	0	0	1	3	4	7	12	17	17	14	9	10	10	4	0	0	0	0	0	0	107	17
29	0	0	0	0	0	0	2	10	31	52	61	65	62	61	55	41	22	13	1	0	0	0	0	0	475	65
30	0	0	0	0	0	0	1	4	4	10	11	15	18	10	8	12	10	4	1	0	0	0	0	0	106	18
31	0	0	0	0	0	0	4	12	19	28	40	64	72	66	54	44	28	12	1	0	0	0	0	0	443	72
TL	0	0	0	0	0	0	36	288	587	910	1109	1230	1256	1241	959	674	429	164	2	0	0	0	0	0	8885	
PK	0	0	0	0	0	0	7	29	40	52	65	71	72	66	55	44	29	13	1	0	0	0	0	0	72	



BAROMETRIC PRESSURE  
MILLIBARS

CB-TRACT  
TRAILER AB23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	788	789	788	788	788	788	788	788	788	788	789	789	788	788	788	788	788	788	788	787	788	788	788	788	789
2	787	788	787	787	787	786	786	786	786	786	785	785	783	782	782	782	784	784	783	783	783	783	783	783	788
3	783	783	782	782	782	781	781	782	782	781	781	781	781	781	780	780	780	780	780	780	780	780	780	780	783
4	780	780	780	780	780	780	781	782	782	783	781	776	776	775	776	778	784	785	785	785	785	786	786	786	786
5	786	786	786	786	786	786	786	787	787	787	787	787	786	784	785	784	784	783	783	783	783	783	783	783	787
6	783	783	783	782	782	782	782	782	782	783	783	783	783	783	782	782	783	783	783	784	784	784	785	784	785
7	784	785	785	786	786	787	787	787	788	788	789	789	789	790	789	790	790	790	790	790	791	791	792	789	785
8	791	792	792	792	792	792	792	793	794	794	795	795	795	795	795	795	795	795	795	795	795	796	796	794	796
9	795	796	796	796	796	796	796	796	796	796	796	796	796	795	795	795	795	794	794	794	794	794	794	794	796
10	794	794	794	794	794	794	794	794	794	794	794	795	794	794	793	793	793	793	793	793	793	793	793	793	795
11	793	793	793	793	793	793	794	793	793	793	794	794	794	794	793	793	793	792	792	792	792	792	792	792	794
12	792	792	792	792	792	792	792	792	792	792	792	792	792	791	791	791	790	790	790	790	789	790	790	790	792
13	790	790	789	790	789	789	789	790	790	789	787	787	782	781	780	786	789	789	789	789	789	789	789	789	790
14	789	789	789	789	788	788	788	788	788	788	788	788	788	787	787	787	787	787	788	789	789	790	790	791	791
15	791	791	791	791	792	793	793	793	794	794	794	794	794	794	793	793	793	794	794	794	794	794	794	795	795
16	795	795	795	795	795	794	794	794	794	793	793	792	791	790	789	788	788	788	788	788	788	787	786	786	791
17	785	785	785	785	785	785	786	786	786	787	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788
18	789	789	789	789	789	789	790	790	791	792	792	792	792	791	791	791	791	791	791	791	791	791	791	791	792
19	792	791	791	791	791	791	791	791	791	790	789	789	789	788	787	787	787	787	786	786	785	785	784	783	792
20	783	782	781	781	780	780	779	779	779	779	778	778	777	777	776	776	776	776	777	777	777	778	778	779	783
21	779	780	780	780	781	782	783	784	784	785	786	787	787	788	788	789	790	790	790	791	791	792	792	793	793
22	793	793	793	793	793	794	794	794	795	795	794	794	794	794	793	793	793	793	793	794	794	794	794	794	795
23	794	794	794	793	794	794	794	794	794	794	794	793	793	793	793	793	792	792	792	792	792	792	792	792	794
24	792	792	792	792	792	791	792	791	791	791	793	793	793	793	794	794	794	794	794	795	795	796	796	796	796
25	796	796	796	796	796	796	796	796	795	795	794	793	793	792	792	792	791	790	789	788	789	789	788	787	793
26	787	786	785	785	785	784	784	783	783	783	783	783	782	780	773	771	771	770	770	770	770	770	771	772	787
27	772	771	772	772	772	772	773	773	773	774	774	774	781	781	782	783	783	782	782	783	783	783	784	783	785
28	783	783	783	783	783	783	783	782	783	783	783	783	783	783	783	783	783	784	784	784	785	784	785	784	785
29	784	784	784	784	785	785	785	785	786	786	787	787	786	786	785	785	785	784	783	782	782	782	781	781	787
30	780	780	779	780	779	779	780	780	780	780	781	782	783	783	784	784	785	785	785	785	786	786	787	786	787
31	786	787	787	787	788	788	789	790	791	791	792	792	792	793	793	793	792	792	792	792	792	792	792	792	791
AV	788	788	788	788	788	788	788	788	788	788	788	788	788	787	787	787	788	787	787	788	788	788	788	788	788
PK	796	796	796	796	796	796	796	796	796	796	796	796	796	795	795	795	795	795	795	795	795	796	796	796	796
MN	772	771	772	772	772	772	773	773	773	774	774	776	776	775	773	771	771	770	770	770	770	770	771	771	772

MONTHLY MINIMUM = 770

PRECIPITATION  
CM\*100

CB-TRACT  
TRAILER AB20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL PEAK
1																									
2																									
3																									
4																									
5																									
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27																									
28																									
29																									
30																									
31																									
TL	43	36	20	18	10	25	20	25	38	41	18	46	10	5	8	18	8	( )	( )	5	( )	( )	( )	8	401
PK	20	13	8	8	5	8	15	13	13	15	13	33	8	5	8	8	8	8	5	5	5	5	5	5	33

PRECIPITATION  
CM\*100

CB-TRACT  
TRAILER AB23  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL PEAK
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
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27																									
28																									
29																									
30																									
31																									
TL	18	15	15	15	15	20	15	53	15	23	23	25	10	5	18	25	( )	( )	( )	( )	( )	( )	3	5	320
PK	13	5	8	5	15	10	8	25	5	8	8	13	5	5	13	13						3	3	5	25

C-B TRACT  
TRAILER AB23  
March, 1981

NOT OPERATIONAL

EVAPORATION



INVERSION HEIGHT  
METERS

CB-TRACT  
TRAILER AC20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	300	305	320	350	375	350	370	400	305	110	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	105	340	405	400	310	295	280	313	405
2	510	470	390	410	425	450	400	385	380	200	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	40	270	350	310	315	290	260	300	342	510
3	400	305	290	340	370	400	420	400	350	295	160	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	250	320	320	350	305	312	420
4	330	340	260	270	260	200	110	100	105	140	150	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	50	220	305	340	360	420	400	242	420
5	500	470	480	400	415	425	315	300	200	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	50	210	340	395	330	320	360	344	500
6	380	380	330	360	350	400	350	250	270	200	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	( )	400
7	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	( )	( )
8	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(NV)	130	110	140	150	150	200	( )	200
9	300	305	250	230	260	300	280	230	160	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	80	190	220	215	260	300	239	305
10	305	295	300	295	300	270	250	250	190	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	80	210	250	320	300	310	320	265	320
11	350	360	395	370	415	440	395	425	450	410	420	400	220	190	(NV)	(NV)	(NV)	(NV)	160	215	305	240	300	295	338	450
12	315	280	285	290	300	300	260	280	210	50	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	150	290	350	375	340	380	278	380
13	370	380	450	470	450	410	415	330	290	120	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	140	250	310	290	320	310	332	470
14	340	300	305	330	380	380	355	360	330	270	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	120	300	350	305	290	310	314	380
15	315	390	420	400	400	405	390	350	320	220	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	110	360	440	505	515	470	376	515
16	340	330	340	350	360	380	400	360	200	50	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	330	440	490	490	410	331	490
17	260	240	180	200	215	220	210	270	400	110	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	130	240	380	390	330	395	261	400
18	490	300	390	500	430	430	400	370	370	440	100	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	60	330	370	400	500	525	400	378	525
19	320	330	405	410	400	450	450	360	150	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	60	195	205	200	210	240	220	288	450
20	230	280	300	300	270	250	310	270	30	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	40	100	250	250	300	300	340	239	340
21	230	215	200	190	150	210	205	170	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	110	240	340	380	320	330	221	380
22	315	340	350	325	380	330	390	400	340	190	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	320	380	395	400	400	380	333	400
23	405	400	360	300	305	350	320	210	30	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	40	200	260	280	290	310	300	273	405
24	330	390	410	330	315	270	240	290	330	200	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	120	250	310	320	330	330	298	410
25	430	400	395	390	405	400	310	290	180	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	120	205	230	200	190	250	277	430
26	330	305	290	290	300	230	250	240	30	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	110	300	390	395	280	220	264	395
27	210	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(NV)	30	210	330	330	250	270	( )	330
28	230	230	390	280	200	160	100	100	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	150	250	315	290	210	390
29	295	290	290	300	295	280	300	250	100	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	90	240	300	300	320	220	258	320
30	240	280	230	210	230	280	200	(NV)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	150	( )	280
31	205	200	220	210	230	230	225	280	240	90	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	40	250	350	340	300	290	295	235	350
AV	330	325	329	325	328	329	308	293	238	193	( )	( )	( )	( )	( )	( )	( )	( )	162	266	319	323	322	311	291	525
PK	510	470	480	500	450	450	450	425	450	440	420	400	220	190	( )	( )	40	270	350	405	440	505	525	470		



STABILITY CLASS @ 50M  
0=STR 1=UNST

CB-TRACT  
TRAILER AC20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	0
7	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	0
8	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	1	0	0	0	0	0	0	( )
9	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	( )
10	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
27	0	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	1
28	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1
29	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1
30	0	0	0	0	0	0	0	1	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	0
31	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	( )
PV	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0

STABILITY CLASS @ 200M  
0=STB 1=UNST

CB-TRACT  
TRAILER AC20  
MAR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
4	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1
5	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	0
7	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	0
8	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	( )
9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	( )
10	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
21	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1
22	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	1
26	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
27	0	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	0
28	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1
29	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1
30	0	0	0	0	0	0	0	1	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	1	0
31	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	( )
PV	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0

STABILITY CLASS USING DT/DZ  
DT 60-10M  
WS 10M

CR-TRACT  
TRAILER AA23  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

		HOUR (LOCAL STANDARD TIME)																											
DAY		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE			
1	E	F	F	F	F	F	F	F	F	E	D	C	B	C	C	C	B	C	D	E	E	E	E	E	E	E	D		
2	E	E	E	D	F	(	E	F	F	E	D	B	B	B	B	C	D	C	D	D	E	D	D	D	F	F	D		
3	D	D	D	D	D	D	D	D	D	E	B	R	R	B	B	B	C	C	C	D	E	D	D	D	F	F	D		
4	F	F	E	D	F	E	E	E	E	E	E	(	C	C	E	B	F	B	F	(	E	E	E	E	E	E	E		
5	F	(	D	E	E	E	E	E	E	E	F	E	D	D	D	D	D	D	D	D	(	E	E	E	E	E	E		
6	F	(	D	E	E	E	E	E	E	E	F	E	D	D	D	D	D	D	D	E	E	D	E	E	E	E	E		
7	E	F	F	F	F	F	F	F	F	F	E	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E		
8	E	F	F	F	F	F	F	F	F	F	E	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E		
9	E	F	F	F	F	F	F	F	F	F	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E		
10	E	F	F	F	F	F	F	F	F	F	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E		
11	F	F	F	F	F	F	F	F	F	F	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E		
12	F	(	(	F	F	F	F	F	F	F	(	(	(	(	(	(	(	(	(	D	D	E	E	E	E	E	E	D	
13	F	(	(	F	F	F	F	F	F	F	(	(	(	(	(	(	(	(	(	D	D	E	E	E	E	E	E	D	
14	F	F	F	F	F	F	F	F	F	F	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
15	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
16	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
17	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
18	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
19	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
20	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
21	F	F	F	F	F	F	F	F	F	F	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
22	F	F	F	F	F	F	F	F	F	F	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
23	F	F	F	F	F	F	F	F	F	F	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
24	F	F	F	F	F	F	F	F	F	F	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
25	F	F	F	F	F	F	F	F	F	F	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
26	E	D	R	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
27	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
28	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
29	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
30	E	E	E	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
31	E	F	F	F	F	F	F	F	F	F	D	D	D	D	D	D	D	D	D	E	E	F	F	F	F	F	E	D	
AVE	E	E	E	E	E	E	E	E	E	E	D	C	C	C	C	C	C	D	D	D	E	E	E	E	E	E	E	D	

TOTAL OCCURRENCES: A= 0 R= 51 C= 77 D=276 E=218 F=110 HOURS MISSING= 12

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

NITRIC OXIDE (NO)

C-B SHALE OIL PROJECT

PERIOD( 3/01/81 TO 3/31/81)

TRAILER AR20

WIND DIRECTION

CONCENTRATION MAX UG/M#3	N		NNE		NE		ENE		E		ESE		SE		SSE		S		SSW		SW		WSW		W		WNW		NW		NNW		CALM		TOTAL
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4		
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	7	10	8	9	45	132	131	25	22	22	13	15	8	26	53	35	11	110	:	660															
TOTAL :	7	10	8	9	45	132	131	25	22	22	13	15	8	26	53	35	11	110	:	660															
MEAN CONC.	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

0 = NO OBSERVATIONS



C-B SHALE OIL PROJECT

TRAILER AB23

0 = NO OBSERVATIONS



# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

OXIDES OF NITROGEN (NOX)

PERIOD( 3/01/81 TO 3/31/81)

TRAILER AB20

WIND DIRECTION

CONCENTRATION MAX UG/M#3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 130. :	7	13	5	9	9	11	9	7	9	5	7	5	7	11	7	5	11	
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	3	7
LT 10. :	7	9	8	9	45	130	131	25	22	13	15	8	26	52	35	11	107	653
TOTAL :	7	10	8	9	45	132	131	25	22	13	15	8	26	53	35	11	110	660
MEAN CONC.	4	6	4	5	5	5	4	4	5	4	4	3	4	5	4	4	5	4

0 = NO OBSERVATIONS

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

OXIDES OF NITROGEN (NOX)

PERIOD( 3/01/81 TO 3/31/81)

TRAILER AR23

WIND DIRECTION

CONCENTRATION	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
MAX	15	16	9	5	11	11	37	18	9	16	11	18	20	13	28	39	11	
UG/M**3																		

GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	9	0	10
20. - 30. :	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	11	0	15
10. - 20. :	2	1	0	0	1	1	0	4	0	1	1	3	1	1	11	16	2	45
LT 10. :	26	10	17	10	12	36	57	71	92	96	98	37	25	27	27	17	6	664
TOTAL :	28	11	17	10	13	37	59	75	92	97	99	40	27	28	40	53	8	734
MEAN CONC.	4	3	2	2	3	2	3	2	1	1	1	2	2	3	8	16	6	3

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-R SHALE OIL PROJECT

NITROGEN DIOXIDE (NO2)

PERIOD( 3/01/81 TO 3/31/81)

TRAILER AB20

WIND DIRECTION

CONCENTRATION MAX UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
	5	9	3	5	5	9	7	3	5	3	5	1	3	5	3	3	7	
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	7	10	8	9	45	132	131	25	22	13	15	8	26	53	35	11	110	660
TOTAL :	7	10	8	9	45	132	131	25	22	13	15	8	26	53	35	11	110	660
MEAN CONC.	2	3	2	2	2	2	2	1	2	2	1	1	1	2	1	1	2	2

0 = NO OBSERVATIONS



NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

NITROGEN DIOXIDE (NO2)

C-B SHALE OIL PROJECT

TRAILER AB23 PERIOD( 3/01/81 TO 3/31/81)

CONCENTRATION MAX UG/M**3	WIND DIRECTION										W				NW				CALM				TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	NW	NNW	NW	NNW	CALM	CALM	TOTAL
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	28	11	17	10	13	37	57	74	92	97	99	40	26	28	38	37	38	37	37	37	8	8	712
TOTAL :	28	11	17	10	13	37	59	75	92	97	99	40	27	28	40	53	40	53	40	53	8	8	734
MEAN CONC.	1	1	0	1	1	0	0	0	0	0	0	0	1	0	4	7	4	7	4	7	3	3	1

0 = NO OBSERVATIONS

C-B SHALE OIL PROJECT

PERIOD( 3/01/81 TO 3/31/81)

WIND DIRECTION

CONCENTRATION  
MAX  
UG/M##3

GT 260. :

240. - 260. :

220. - 240. :

200. - 220. :

180. - 200. :

160. - 180. :

140. - 160. :

120. - 140. :

100. - 120. :

80. - 100. :

60. - 80. :

40. - 60. :

20. - 40. :

LT 20.:

TOTAL :

•

2000

0 = NO OBSERVATIONS

(05/11/81-RPI)



NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

OZONE (03)

C-B SHALE OIL PROJECT

TRAILER AB23 PERIOD( 3/01/81 TO 3/31/81)

WIND DIRECTION

CONCENTRATION MAX UG/M*3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
	123	111	111	111	107	109	109	147	148	127	121	119	121	109	105	105	105	96
GT 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
240. - 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220. - 240. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200. - 220. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180. - 200. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160. - 180. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140. - 160. :	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3
120. - 140. :	1	0	0	0	0	0	0	0	8	6	2	0	1	0	0	0	0	18
100. - 120. :	9	2	2	2	1	2	4	15	19	44	25	8	5	4	1	5	0	148
80. - 100. :	18	7	11	7	6	18	37	29	39	29	32	17	13	15	24	28	3	333
60. - 80. :	0	2	3	1	5	17	14	25	14	14	32	13	7	8	15	24	5	199
40. - 60. :	0	0	0	0	1	0	2	0	0	1	7	2	1	1	0	2	0	17
20. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL :	28	11	16	10	13	37	57	70	82	94	98	40	27	28	40	59	8	718
MEAN CONC.	98	89	89	92	79	82	85	88	96	97	86	85	87	83	82	82	75	88

0 = NO OBSERVATIONS

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

CARBON MONOXIDE (CO)

C-B SHALE OIL PROJECT

PERIOD( 3/01/81 TO 3/31/81)

TRAILER

AB20

WIND DIRECTION

CONCENTRATION	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
MAX	0	5	3	3	6	5	5	4	4	4	20	1	1	3	4	2	6	
UG/M**3																		
GT 4000. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3750. -4000. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3500. -3750. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3250. -3500. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3000. -3250. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2750. -3000. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2500. -2750. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2250. -2500. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000. -2250. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1750. -2000. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500. -1750. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1250. -1500. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000. -1250. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 1000. :	7	10	8	9	45	132	131	25	22	13	15	8	20	49	31	11	110	646
TOTAL :	7	10	8	9	45	132	131	25	22	13	15	8	20	49	31	11	110	646
MEAN CONC.	0	1	1	0	0	0	0	1	1	1	3	0	0	0	0	0	0	0

0 = NO OBSERVATIONS

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

CARBON MONOXIDE (CO)

C-B SHALE OIL PROJECT

PERIOD( 3/01/81 TO 3/31/81)

AB23

TRAILER

WIND DIRECTION

CONCENTRATION MAX UG/M**3	WIND DIRECTION																NW	NNW	CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	WN	68	57	22		
103	126	91	45	11	34	22	149	206	241	172	206	45	34	68	57	22				

GT 4000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 1000.	28	11	17	10	13	37	59	75	92	97	99	40	27	28	40	59	8	740	
TOTAL	28	11	17	10	13	37	59	75	92	97	99	40	27	28	40	59	8	740	

MEAN  
CONC.

0 = NO OBSERVATIONS



# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

SULFUR DIOXIDE (SO2)

C-B SHALE OIL PROJECT

PERIOD( 3/01/81 TO 3/31/81)

TRAILER AB20

WIND DIRECTION

CONCENTRATION MAX UG/M*3	WIND DIRECTION																												TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL											
	2	5	2	7	7	7	5	5	2	5	2	5	7	7	7	5	7												
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
LT 10. :	7	10	8	9	45	132	131	25	22	13	15	8	26	53	34	11	110	659											
TOTAL :	7	10	8	9	45	132	131	25	22	13	15	8	26	53	34	11	110	659											
MEAN	2	2	2	3	2	2	2	3	1	2	2	2	2	2	2	2	2	2	2										

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

SULFUR DIOXIDE (SO2)

C-B SHALE OIL PROJECT

PERIOD( 3/01/81 TO 3/31/81)

TRAILER AB23

WIND DIRECTION

CONCENTRATION MAX UG/M*3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	28	11	17	10	13	37	59	73	90	96	99	40	27	28	40	58	8	734
TOTAL :	28	11	17	10	13	37	59	73	90	96	99	40	27	28	40	58	8	734
MEAN CONC.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = NO OBSERVATIONS

II-442



# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

HYDROGEN SULFIDE (H2S)

PERIOD( 3/01/81 TO 3/31/81)

TRAILER AB23

WIND DIRECTION

CONCENTRATION MAX UG/M**3	WIND DIRECTION															
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	5	5	6	3	3	7	9	38	41	34	25	10	5	7	10	27
TOTAL :	5	5	6	3	3	7	9	38	41	34	25	10	5	7	10	27
MEAN CONC.	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0

MEAN  
CONC.

0 = NO OBSERVATIONS

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

C-B SHALE OIL PROJECT

STATION AB20 PERIOD( 3/01/81 TO 3/31/81)

## WIND DIRECTION

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
WIND SPEED MAX METERS/SEC	2	2	0	1	4	5	5	6	4	2	2	2	4	4	4	2	0	

GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. - 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. - 8. :	0	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	6
3. - 5. :	0	0	0	0	3	8	34	11	11	0	0	0	11	7	8	0	0	93
1. - 3. :	3	3	0	1	7	57	67	7	10	8	14	4	11	37	20	8	0	257
LT 1. :	4	7	8	8	35	66	27	5	1	5	1	4	4	9	7	3	0	194
TOTAL :	7	10	8	9	45	132	131	25	22	13	15	8	26	53	35	11	0	550
PERCENT	1.	2.	1.	2.	8.	24.	24.	5.	4.	2.	3.	1.	5.	10.	6.	2.	0.	100.

0 = NO OBSERVATIONS

II-444

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

C-B SHALE OIL PROJECT

STATION AA23 PERIOD( 3/01/81 TO 3/31/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
GT 11. :	4	2	3	2	2	3	3	5	9	10	7	4	5	4	4	6	0	
8. - 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 : 0	0
5. - 8. :	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0 : 0	5
3. - 5. :	9	0	2	0	0	1	2	11	25	32	20	9	6	6	14	19	0 : 0	156
1. - 3. :	8	8	8	2	5	24	36	45	26	20	40	12	13	18	19	29	0 : 0	313
LT 1. :	11	3	7	8	8	12	21	18	20	27	35	19	7	4	7	5	0 : 0	212
TOTAL :	28	11	17	10	13	37	59	75	92	97	99	40	27	28	40	59	0	732
PERCENT	4.	2.	2.	1.	2.	5.	8.	10.	13.	13.	14.	5.	4.	4.	5.	8.	0.	100.

0 = NO OBSERVATIONS

II-445

(05/11/81-RPI)

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

30 METER LEVEL

C-B SHALE OIL PROJECT

STATION AA23 PERIOD( 3/01/81 TO 3/31/81)

## WIND DIRECTION

WIND SPEED MAX		WIND DIRECTION																TOTAL	
METERS/SEC		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
GT 11. :		4	5	4	5	4	6	7	9	13	8	10	5	7	6	8	8	0	
8. - 11. :		0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
5. - 8. :		0	0	0	0	0	0	0	8	9	2	2	0	0	0	1	1	0	23
3. - 5. :		6	3	4	6	3	23	26	6	8	17	9	7	5	11	15	23	0	172
1. - 3. :		10	7	8	14	25	45	38	24	15	12	5	11	7	11	15	18	0	265
LT 1. :		9	5	6	11	16	18	23	9	8	9	8	5	4	3	9	4	0	147
TOTAL :		25	16	18	32	44	94	94	54	62	73	32	24	21	30	46	59	0	724
PERCENT		3.	2.	2.	4.	6.	13.	13.	7.	9.	10.	4.	3.	3.	4.	6.	8.	0.	100.

0 = NO OBSERVATIONS

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

60 METER LEVEL

C-B SHALE OIL PROJECT

STATION AA23 PERIOD( 3/01/81 TO 3/31/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	
GT 11. :	0	0	0	0	0	0	0	0	7	1	1	0	0	0	0	0	0 :	9
8. - 11. :	2	0	0	0	1	0	0	0	13	17	4	1	0	1	0	3	0 :	42
5. - 8. :	4	4	6	2	0	2	0	5	17	40	19	5	3	5	7	6	0 :	125
3. - 5. :	13	12	8	5	5	8	9	18	17	25	19	9	8	10	11	12	0 :	189
1. - 3. :	19	13	19	17	10	9	12	26	23	23	22	7	10	10	7	12	0 :	239
LT 1. :	10	7	11	6	5	4	8	6	12	11	6	1	4	2	11	2	0 :	106
TOTAL :	48	36	44	30	21	23	29	55	89	117	71	23	25	28	36	35	0	710
PERCENT	7.	5.	6.	4.	3.	3.	4.	8.	13.	16.	10.	3.	4.	4.	5.	5.	0.	100.

0 = NO OBSERVATIONS



C-B SHALE OIL PROJECT

FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

STATION AD42 PERIOD (3/1/81 to 3/31/81)

DATA NOT AVAILABLE AT REPORT TIME

C-B SHALE OIL PROJECT

FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

STATION AD56 PERIOD (3/1/81 to 3/31/81)

DATA NOT AVAILABLE AT REPORT TIME

FIVE MAXIMUM SLIDING AVERAGE  
UG/M\*\*3

C-B TRACT  
SITE AR20  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR(BEG)	VALUE
S02	3 HR	1	9	18	7.9
		2	9	21	7.9
		3	10	6	7.9
		4	10	10	7.9
		5	9	24	7.0
S02	24 HR	1	9	15	6.8
		2	26	2	4.1
		3	12	15	3.3
		4	1	1	2.6
		5	2	1	2.6
C0	1 HR	1	31	13	0.0
		2	31	14	0.0
		3	18	8	0.0
		4	18	9	0.0
		5	19	10	0.0
C0	8 HR	1	31	12	0.0
		2	19	7	0.0
		3	18	5	0.0
		4	18	23	0.0
		5	19	15	0.0
O3	1 HR	1	12	16	121.6
		2	9	17	117.7
		3	27	7	117.7
		4	12	17	115.8
		5	10	14	113.8
PART	24 HR	1	12	1	5.9
		2	18	1	5.9
		3	18	1	5.9
		4	18	1	5.9
		5	18	1	5.9

FIVE MAXIMUM SLIDING AVERAGE  
UG/M\*\*3

C-B TRACT  
SITE AR23  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR (BEG)	VALUE
SO2	3 HR	1	5	12	2.6
		2	5	15	2.6
		3	5	18	2.6
		4	5	21	2.6
		5	5	24	2.6
SO2	24 HR	1	5	12	2.6
		2	6	12	2.6
		3	7	12	0.2
		4	7	12	0.0
		5	7	12	0.0
CO	1 HR	1	2	15	200.0
		2	2	14	200.0
		3	13	14	200.0
		4	13	13	200.0
		5	2	17	200.0
CO	8 HR	1	2	12	200.0
		2	19	15	100.0
		3	13	8	100.0
		4	10	13	100.0
		5	5	11	100.0
O3	1 HR	1	27	8	149.1
		2	27	6	147.1
		3	27	7	147.1
		4	27	9	137.3
		5	27	15	127.5
PART	24 HR	1	27	1	15.3
		2	30	1	8.4
		3	12	1	7.0
		4	3	1	5.6
		5	18	1	5.1

ERROR IN FILE SEARCH NR

FIVE MAXIMUM SLIDING AVERAGE  
UG/M\*\*3

C-B TRACT  
SITE AD56  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR (BEG)	VALUE
PART	24 HR				
		1	27	1	12.7
		2	30	1	8.4
		3	12	1	7.2
		4	18	1	6.4
		5	15	1	4.1



SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB20  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

NO NO<sub>x</sub> NO<sub>2</sub> O<sub>3</sub> CO SO<sub>2</sub>

MULTIPOINT  
RECORDER \*

DATA ACQUISITION  
SYSTEM

92 92 92 92 90 90

OTHER SYSTEMS

EFFICIENCY 92 92 92 92 90 90

\* Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB20  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

PRECIP.

PART

STB  
200m

STB  
50m

INVERS.  
HT

TEMP

SIGMA  
HWD 10m

WD

WS

MULTIPOINT  
RECORDER \*

DATA ACQUISITION  
SYSTEM

25

89

89

89

OTHER SYSTEMS

77

88

100

100

100

EFFICIENCY

77

88

100

100

100

25

89

89

89

\* Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB23

MAR 1981  
OCCIDENTAL OIL SHALE, INC.

NO	NO <sub>x</sub>	NO <sub>2</sub>	O <sub>3</sub>	SO <sub>2</sub>	H <sub>2</sub> S	CO	BAR PRESS.	SOLAR RAD.
----	-----------------	-----------------	----------------	-----------------	------------------	----	---------------	---------------

MULTIPOINT  
RECORDER \*

DATA ACQUISITION  
SYSTEM

99	99	99	97	99	32	100	100	100
----	----	----	----	----	----	-----	-----	-----

OTHER SYSTEMS

EFFICIENCY

99	99	99	97	99	32	100	100	100
----	----	----	----	----	----	-----	-----	-----

\* Serves as Back-up to Data Acquisition System

C-b TRACT  
TRAILER AB23  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

SOURCE OF DATA REPORTED  
PERCENT

PREC

PART

RH

DT  
60-10m

TMP  
60m

TMP  
30m

TMP  
10m

MULTIPOINT  
RECORDER \*

DATA ACQUISITION  
SYSTEM

100

100

100

100

OTHER SYSTEMS

77

88

52

EFFICIENCY

100

100

100

100

52

88

77

\* Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-bTRACT  
TRAILER AB23  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

SIGMA HWD 10m	SIGMA HWD 30m	SIGMA HWD 60m	WS 10m	WS 30m	WS 60m	WD 10m	WD 30m	WD 60m
------------------	------------------	------------------	-----------	-----------	-----------	-----------	-----------	-----------

MULTIPOINT  
RECORDER \*

DATA ACQUISITION  
SYSTEM

100	100	97	100	100	100	100	100	97
-----	-----	----	-----	-----	-----	-----	-----	----

OTHER SYSTEMS

100	100	97	100	100	100	100	100	97
-----	-----	----	-----	-----	-----	-----	-----	----

EFFICIENCY

\*Serves as Back-up to Data Acquisition System



SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
SITE AD42  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

WS 10m  
WD 10m  
TMP 10m

OTHER SYSTEMS

EFFICIENCY

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
SITE AD56  
MAR 1981  
OCCIDENTAL OIL SHALE, INC.

WS 10m  
WD 10m  
TMP 10m  
PART

OTHER SYSTEMS

88

EFFICIENCY

88

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AIR MONITORING REPORT  
FOR  
PROTOTYPE OIL SHALE LEASE TRACT C-B

APRIL 1981

SUBMITTED  
JUNE 10, 1981



PREPARED BY :  
OCCIDENTAL OIL SHALE, INC. OPERATOR  
P.O. BOX 2687  
GRAND JUNCTION, COLORADO 81501

## LIST OF TABLES

### SECTION I - AIR QUALITY & METEOROLOGICAL DATA

	<u>Page</u>
DIURNAL VARIATION OF GASEOUS AND PARTICULATE MATTER	
Nitric Oxide (NO) at Station AB20 . . . . .	II-466
Nitric Oxide (NO) at Station AB23 . . . . .	II-467
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB20 . . . . .	II-468
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB23 . . . . .	II-469
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB20 . . . . .	II-470
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB23 . . . . .	II-471
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-472
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-473
Carbon Monoxide (CO) at Station AB20 . . . . .	II-474
Carbon Monoxide (CO) at Station AB23 . . . . .	II-475
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 . . . . .	II-476
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 . . . . .	II-477
Hydrogen Sulfide (H <sub>2</sub> S) at Station AB23 . . . . .	II-478
Particulates Daily Average at Stations AB20, AB23, AD56 . . .	II-479
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS	
Wind Speed at Station AB20 . . . . .	II-480
Wind Speed at Station AA23 - 10 Meter Level . . . . .	II-481
Wind Speed at Station AA23 - 30 Meter Level . . . . .	II-482
Wind Speed at Station AA23 - 60 Meter Level . . . . .	II-483
Wind Speed at Station AD42 . . . . .	II-484
Wind Speed at Station AD56 . . . . .	II-485
Wind Direction at Station AB20 . . . . .	II-486
Wind Direction at Station AA23 - 10 Meter Level . . . . .	II-487
Wind Direction at Station AA23 - 30 Meter Level . . . . .	II-488
Wind Direction at Station AA23 - 60 Meter Level . . . . .	II-489
Wind Direction at Station AD42 . . . . .	II-490
Wind Direction at Station AD56 . . . . .	II-491

LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS (Contd)	
Wind Direction and Vector Average at Station AB20 . . . . .	II-492
Wind Direction and Vector Average at Station AA23 -	
10 Meter Level . . . . .	II-493
Wind Direction and Vector Average at Station AA23 -	
30 Meter Level . . . . .	II-494
Wind Direction and Vector Average at Station AA23 -	
60 Meter Level . . . . .	II-495
Sigma Horizontal Wind Direction at Station AB20 -	
10 Meter Level . . . . .	II-496
Sigma Horizontal Wind Direction at Station AA23 -	
10 Meter Level . . . . .	II-497
Sigma Horizontal Wind Direction at Station AA23 -	
30 Meter Level . . . . .	II-498
Sigma Horizontal Wind Direction at Station AA23 -	
60 Meter Level . . . . .	II-499
Ambient Air Temperature at Station AB20 . . . . .	II-500
Ambient Air Temperature at Station AA23 -	
10 Meter Level . . . . .	II-501
Ambient Air Temperature at Station AA23 -	
30 Meter Level . . . . .	II-502
Ambient Air Temperature at Station AA23 -	
60 Meter Level . . . . .	II-503
Ambient Air Temperature at Station AD42 . . . . .	II-504
Ambient Air Temperature at Station AD56 . . . . .	II-505
Delta Temperature (60m - 10m) at Station AA23 . . . . .	II-506
Relative Humidity at Station AB23 - 3 Meter Level . . . . .	II-507
Solar Radiation at Station AB23 . . . . .	II-508
Barometric Pressure at Station AB23 . . . . .	II-509
Precipitation at Station AB20 . . . . .	II-510
Precipitation at Station AB23 . . . . .	II-511
Evaporation at Station AB23 . . . . .	II-512

# LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
DIURNAL VARIATION OF METEOROLOGICAL PARAMETERS (Contd)	
Inversion Height at Station AC20 . . . . .	II-513
Stability Class at Station AC20 - 50 Meter Level . . . . .	II-514
Stability Class at Station AC20 - 200 Meter Level . . . . .	II-515
Pasquill-Gifford Stability Class using DT/DZ - (60m - 10m) at Station AA23 . . . . .	II-516

## MONTHLY SUMMARY REPORT: NO. OF 1 - HOUR SAMPLES OF GASEOUS PARAMETERS BY CONCENTRATION AND BY WIND DIRECTION, 10 METER LEVEL

Nitric Oxide (NO) at Station AB20 . . . . .	II-517
Nitric Oxide (NO) at Station AB23 . . . . .	II-518
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB20 . . . . .	II-519
Oxides of Nitrogen (NO <sub>x</sub> ) at Station AB23 . . . . .	II-520
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB20 . . . . .	II-521
Nitrogen Dioxide (NO <sub>2</sub> ) at Station AB23 . . . . .	II-522
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-523
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-524
Carbon Monoxide (CO) at Station AB20 . . . . .	II-525
Carbon Monoxide (CO) at Station AB23 . . . . .	II-526
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 . . . . .	II-527
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 . . . . .	II-528
Hydrogen Sulfide (H <sub>2</sub> S) at Station AB23 . . . . .	II-529

## MONTHLY SUMMARY REPORT: FREQUENCY TABLE OF WIND SPEED BY DIRECTION

Station AB20 . . . . .	II-530
Station AA23 - 10 Meter Level . . . . .	II-531
Station AA23 - 30 Meter Level . . . . .	II-532
Station AA23 - 60 Meter Level . . . . .	II-533
Station AD42 . . . . .	II-534
Station AD56 . . . . .	II-535

## MONTHLY SUMMARY REPORT: FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES

Particulate at Station AB20 . . . . .	II-536
Ozone (O <sub>3</sub> ) at Station AB20 . . . . .	II-536



LIST OF TABLES SECTION I (Contd)

	<u>Page</u>
MONTHLY SUMMARY REPORT: FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES (Contd)	
Carbon Monoxide (CO) at Station AB20 - 1 Hour . . . . .	II-536
Carbon Monoxide (CO) at Station AB20 - 8 Hour . . . . .	II-536
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 - 3 Hour . . . . .	II-536
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB20 - 24 Hour . . . . .	II-536
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 - 3 Hour . . . . .	II-537
Sulfur Dioxide (SO <sub>2</sub> ) at Station AB23 - 24 Hour . . . . .	II-537
Ozone (O <sub>3</sub> ) at Station AB23 . . . . .	II-537
Particulate at Station AB23 . . . . .	II-537
Carbon Monoxide (CO) at Station AB23 - 1 Hour . . . . .	II-537
Carbon Monoxide (CO) at Station AB23 - 8 Hour . . . . .	II-537
Particulate at Station AD56 . . . . .	II-538
MONTHLY SUMMARY REPORT: INSTRUMENT EFFICIENCY	
Station AB20 . . . . .	II-539
Station AB23 . . . . .	II-541
Station AD42 . . . . .	II-544
Station AD56 . . . . .	II-545



NITRIC OXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(IM)	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	(CA)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
23	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

NITRIC OXIDE  
(UG/M3)

CB-IRACI  
TRAILER AB23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	2	1	2
2	2	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1	2	5	10	4	4	5	7	9	9	10	4	4	4	4	5	4	10
4	5	5	5	5	6	5	6	6	5	5	6	5	2	6	5	2	2	4	4	4	4	5	5	5	5	6
5	5	5	6	6	6	9	6	6	6	5	4	4	4	2	2	2	1	1	1	1	2	2	2	4	4	9
6	4	4	4	4	4	5	5	5	5	2	1	0	0	0	0	0	0	0	0	0	2	2	2	4	4	5
7	2	2	2	2	4	4	6	4	4	4	4	4	5	6	2	1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	1	2
8	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	4
9	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
11	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
14	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
15	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
16	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
17	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
18	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
19	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
20	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
21	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
22	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
23	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
24	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
25	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
26	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
27	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
28	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
29	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
30	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )

AV	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	10
PK	5	5	6	6	6	9	6	6	6	5	6	10	5	6	5	7	9	9	10	4	4	5	5	5	5	10

OXIDES OF NITROGEN  
(UG/M3)

CB-TRACT  
THALEM AB20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE	PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	
8	0	0	0	0	0	0	0	0	0	0	0	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
16	(CA)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21	0	0	0	0	0	0	0	0	0	0	0	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(CA)	0	
22	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	
23	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0	0	0	0	0	0	0	0	0	0	
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PK	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

OXIDES OF NITROGEN  
(UG/M3)

CB-FRACT  
TRAILER AB23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOOR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	4	6	4	4	2	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	6
2	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
3	0	0	0	0	0	0	0	0	0	8	11	26	8	6	11	17	24	28	36	8	6	9	8	8	9	36
4	8	8	9	9	11	9	15	11	8	9	11	9	4	13	11	4	4	6	8	11	8	8	9	11	9	15
5	11	9	9	11	13	19	11	9	9	8	6	6	4	4	2	2	2	2	0	0	4	4	6	6	7	19
6	8	6	6	8	6	8	8	8	8	4	0	0	0	0	0	0	55	73	75	75	75	75	73	73	27	75
7	73	73	73	73	73	73	73	75	75	75	75	75	77	75	75	77	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	75	77
8	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
9	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
11	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
14	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
15	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
16	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
17	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
18	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
19	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
20	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
21	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
22	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
23	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
24	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
25	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
26	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
27	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
28	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
29	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
30	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )	( )
AV	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
PK	73	73	73	73	73	73	73	75	75	75	75	75	77	75	75	77	55	73	75	75	75	75	73	73	77	77



NITROGEN DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE	PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	
8	0	0	0	0	0	0	0	0	0	0	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16	(CA)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21	0	0	0	0	0	0	0	0	0	0	0	(IM)	(IM)	(IM)	(IM)	0	0	0	0	0	0	0	0	(CA)	0	
22	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	(CA)	0	0	0	0	0	0	0	0	0	(CA)	0	
23	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0	0	0	0	0	0	0	0	0	0	
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PK	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



CH-TRACI  
TRAILER AHD3  
APR 1981  
OCCIDENTAL OIL SHALE INC.

[illegible]

OZONE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	57	57	59	59	61	59	67	61	63	65	69	73	73	74	76	74	74	73	49	43	39	41	41	41	60	76
2	43	41	41	39	43	45	47	49	59	69	73	74	74	74	74	73	74	73	59	65	59	61	61	59	60	74
3	55	61	63	59	57	55	55	57	59	59	59	61	61	69	71	73	73	69	59	65	57	51	53	41	60	73
4	39	43	39	39	45	49	53	59	69	69	73	74	76	76	74	74	74	73	63	61	59	59	59	(CA)	61	76
5	59	61	63	61	59	59	61	61	65	74	74	78	76	76	74	73	73	71	59	47	51	49	55	55	64	78
6	55	55	55	53	55	49	49	47	59	59	61	65	74	74	76	76	76	78	70	57	43	53	43	37	59	78
7	29	24	22	24	25	33	33	29	35	41	59	61	59	61	61	65	65	63	57	57	55	45	47	(CA)	40	65
8	43	43	49	57	45	39	39	57	57	61	69	65	74	67	67	71	73	74	69	61	55	49	43	39	57	74
9	39	37	39	41	41	41	37	41	65	67	74	74	78	76	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	54	74
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	71	73	73	71	71	67	65	73	69	67	47	41	41	41	(CA)	62	73
11	39	39	39	35	37	35	37	39	59	65	69	69	71	69	69	73	74	73	63	45	39	41	39	39	52	74
12	(CA)	41	43	43	43	41	41	45	63	69	71	71	73	74	73	74	74	69	59	45	43	45	45	43	50	74
13	(CA)	45	39	39	41	39	39	43	59	65	71	71	73	76	76	65	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	56	76
14	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	59	59	61	59	59	59	59	63	61	47	39	35	33	33	52	63
15	29	25	25	22	22	25	43	41	49	51	55	57	59	59	61	63	61	59	57	49	43	25	22	22	43	63
16	(CA)	18	20	20	20	22	22	29	49	59	59	63	63	69	69	67	67	67	55	45	39	41	41	39	45	69
17	37	37	37	39	39	39	39	35	49	69	71	74	76	74	74	74	74	74	63	45	39	39	39	35	53	76
18	33	29	25	33	29	18	22	25	45	53	65	65	69	67	69	71	67	59	65	63	59	59	43	43	49	71
19	59	49	55	59	45	39	41	43	45	55	59	59	59	59	59	61	61	61	59	59	53	43	39	25	52	61
20	20	22	20	20	20	20	20	25	49	63	63	65	65	63	63	61	59	59	59	59	49	35	37	25	43	65
21	25	25	27	25	25	27	31	37	55	61	59	59	59	59	59	59	61	59	57	51	45	41	39	(CA)	40	61
22	20	12	10	14	4	10	10	22	39	51	57	59	59	61	59	59	59	59	53	35	25	24	22	(CA)	36	61
23	20	20	20	20	20	16	20	24	47	55	(CA)	(CA)	53	49	49	47	47	47	39	29	20	20	18	18	32	55
24	18	18	20	20	20	18	22	25	43	53	55	57	55	(CA)	57	(MT)	57	55	49	47	35	29	25	25	36	57
25	24	22	22	22	24	22	27	25	33	51	55	59	59	61	61	63	69	67	65	59	39	43	49	41	44	69
26	35	39	39	39	37	35	29	31	37	59	61	61	59	61	61	61	61	61	59	57	39	35	35	37	47	61
27	29	29	27	25	25	24	25	25	39	57	59	61	61	63	65	65	65	65	59	57	55	55	49	45	47	65
28	41	29	20	16	6	6	8	12	29	43	55	59	61	61	61	61	61	59	59	55	41	24	20	20	38	61
29	20	22	20	20	16	18	18	20	25	39	45	49	49	47	45	47	47	53	47	41	35	22	20	20	33	53
30	20	20	16	16	16	18	16	18	22	39	43	45	49	49	53	55	59	59	57	45	33	25	20	20	34	59
AV	36	34	34	34	33	32	34	37	49	58	62	64	65	65	65	65	66	64	59	51	44	40	38	35	49	78
PK	59	61	63	61	61	59	67	61	69	74	74	78	78	76	76	76	76	78	76	65	59	61	61	59		

02041  
(06/743)

CB-TRACI  
TRAILER AR23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOOR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	104	104	104	108	114	112	112	112	112	116	120	122	122	125	127	123	122	120	114	112	110	108	106	100	114	127
2	100	104	106	108	110	106	104	108	116	120	118	120	120	120	120	118	120	116	112	112	104	112	108	106	112	120
3	104	112	112	106	104	100	98	100	104	92	90	88	104	112	112	112	106	100	84	112	108	106	108	98	103	112
4	100	98	100	102	94	96	104	104	114	116	118	120	123	118	122	123	125	123	123	116	116	112	110	116	111	125
5	112	116	118	122	120	114	118	116	125	129	129	131	133	131	122	116	118	116	106	114	108	110	110	112	118	133
6	112	110	104	100	96	100	100	100	104	108	108	112	120	123	127	131	133	131	125	116	104	96	90	88	110	133
7	78	76	76	71	65	59	41	53	73	100	116	112	94	88	100	110	104	100	90	84	84	78	82	74	84	116
8	84	88	108	96	92	80	82	100	110	118	118	120	120	120	122	123	125	125	118	114	110	100	104	100	107	125
9	104	100	100	102	108	110	112	120	123	123	123	123	123	122	118	120	125	123	120	114	114	116	116	108	115	123
10	104	100	104	104	104	102	94	96	112	116	114	116	112	108	108	114	122	118	110	106	106	104	104	104	107	122
11	102	102	100	84	94	98	98	100	104	110	114	118	116	118	120	122	123	122	116	104	98	104	110	114	106	123
12	106	104	100	96	98	102	106	114	118	118	120	120	123	125	125	123	123	120	112	114	116	116	116	112	114	125
13	112	104	104	104	100	104	88	104	112	110	118	112	116	116	118	120	116	114	100	110	104	86	82	86	106	120
14	88	88	76	90	90	90	86	55	84	88	104	116	118	120	120	120	116	112	118	104	102	104	110	112	100	120
15	112	102	104	102	90	86	90	92	98	100	108	112	114	120	122	122	120	102	108	106	96	94	88	94	103	122
16	88	96	94	92	100	90	82	98	116	120	118	123	127	131	133	125	116	125	122	118	118	118	114	110	111	133
17	104	100	102	102	102	102	102	104	123	127	131	133	133	135	139	137	139	137	127	127	122	114	114	114	117	129
18	114	108	112	120	112	108	112	98	106	110	129	125	116	125	122	118	116	118	114	108	102	98	90	88	104	118
19	104	106	106	106	102	94	94	88	96	106	108	110	112	110	112	114	116	118	114	110	102	100	100	98	103	122
20	84	94	82	73	74	86	84	82	114	120	120	120	120	122	122	114	116	118	114	96	78	84	86	76	104	120
21	100	96	100	92	96	100	100	106	116	118	118	118	114	114	112	112	110	108	106	92	86	92	86	84	86	116
22	55	59	35	53	55	57	63	65	86	98	102	100	94	96	96	92	92	90	86	86	73	73	74	74	87	102
23	86	92	94	86	76	78	69	73	100	102	100	106	106	110	108	106	102	98	100	86	84	84	84	84	94	110
24	78	80	86	92	96	96	86	80	102	100	104	106	114	122	125	127	127	127	122	110	110	116	112	116	104	127
25	84	78	80	80	80	76	76	84	100	108	110	114	116	122	123	123	123	122	116	114	108	104	108	104	113	123
26	110	108	104	98	108	106	108	112	116	118	118	118	118	125	133	133	133	118	100	110	94	92	102	100	108	133
27	108	98	86	100	94	98	88	98	114	114	110	116	125	133	133	133	110	106	102	102	96	94	88	82	96	127
28	71	78	78	76	73	71	76	86	94	104	112	120	127	120	120	118	110	102	86	86	90	90	82	86	84	102
29	82	82	84	80	82	76	55	63	76	88	96	94	94	94	(1M)	(1M)	(1M)	102	86	86	90	90	82	86	84	102
30	84	82	86	92	88	90	78	74	94	104	104	94	94	100	104	108	118	118	114	112	108	108	102	94	98	118
AV	96	96	95	95	94	93	90	93	105	110	113	114	116	117	119	119	118	116	110	106	102	101	100	98	105	139
PK	114	116	118	122	120	114	118	120	125	129	131	133	133	135	139	137	139	137	137	127	123	122	118	116	116	139

CARBON MONOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	0	0	0	0	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	(CA)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



CARBON MONOXIDE  
(UG/M3)

CB-IRACI  
TRAILER AH23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



SULFUR DIOXIDE  
(UG/M3)

CB-FRACT  
TRAILER AR20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(IM)	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	(CA)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(CA)	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SULFUR DIOXIDE  
(UG/M3)

CB-TRACT  
TRAILER AB23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																				24	AVE	PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

HYDROGEN SULFIDE  
(UG/M3)

CH-TRACT  
TRAILER AB23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	0
8	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	0	0
AV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PARTICULATE DATA  
UG/M3

CH-TRACT  
APR 1981  
OCCIDENTAL OIL SHALE, INC

DAY	AB20	STATION AB23	AU56
3	1.5	3.0	2.2
6	5.9	6.2	4.2
9	8.1	9.9	6.3
12	17.3	16.7	5.7
15	15.8	10.8	10.3
18	1.9	21.0	3.5
21	11.4	14.7	7.2
24	50.9	7.3	2.1
27	19.9	17.5	12.2
30	26.7	17.3	12.3
PK	50.9	21.0	12.3
AV	16.1	12.4	6.6
GM	10.2	10.9	5.5

WIND SPEED @10M  
METERS/SEC

CB-TRACT  
TRAILER AB20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	4	4	3	3	2	3	1	0	2	2	1	3	3	4	4	4	4	3	1	1	2	2	3	4	3	4
2	3 (CM)	1 (CM)	2 (CM)	1 (CM)	0 (CM)	4 (CM)	4 (CM)	3	2	4	4	4	4	5	4	5	4	2	2 (IM)	1 (IM)	1	2	2	2	3	3
3	4 (IM)	1 (IM)	1 (IM)	1 (IM)	1 (IM)	1 (IM)	1 (IM)	1 (IM)	3	4	3	3	2	3	2	2	2	2	2 (CM)	2 (CM)	2	2	2	2	2	2
4	4	4	4	4	4	4	5	4	3	3	4	4	3	2	2	2	2	2	1	0	2	2	2	2	2	2
5	4	1	1 (CM)	1	4	4 (CM)	5 (CM)	3	2	3	4	4	4	4	4	4	4	4	3	2	2 (CM)	2	2	2	2	2
6	1	1	2	1	2	2	1 (CM)	1 (CM)	1	2	2	3	3	4	4	4	4	4	2	3	2	1	1	1	1	3
7	1	1	1	1	1	1	1 (IM)	1 (IM)	2	2	2	3	2	2	3	3	3	3	2	1	1	1	1	1	2	2
8	1	1	1	1	1	1	1 (IM)	1 (IM)	4	4	4	4	4	5	4	4	4	4	2	1	1	1	1	1	2	2
9	2	2	3	2	2	1	1 (IM)	1 (IM)	1	4	4	4	4	4	4	4	4	4	2	2	1	1	1	1	1	3
10	1 (IM)	1 (IM)	1 (IM)	1 (IM)	1 (IM)	1 (IM)	1 (IM)	1 (IM)	1	4	4	4	4	4	4	4	4	4	2	2	1	1	1	1	1	3
11	2	1 (CM)	1	2	1	0	1 (CM)	0	3	3	3	4	4	5	4	4	4	4	4	1	0	0	0	0	1	2
12	2	1	1	2	2	1	1	1	2	3	3	4	4	4	4	4	4	4	1	1 (IM)	1	1	1	1	2	2
13	0	0 (CM)	0 (CM)	0 (CM)	1	1 (CM)	1	1	1	2	2	2	2	2	3	3	3	3	2	2	1	1	1	1	0	2
14	0 (CM)	0 (CM)	0 (CM)	0 (CM)	0 (CM)	0 (CM)	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
15	0 (CM)	0 (CM)	0 (CM)	0 (CM)	0 (CM)	0 (CM)	1	1	2	3	3	3	3	4	4	4	4	4	3	3 (IM)	2	2	2	2	2	2
16	1	1	2	2	2	3	4	4	2	3	2	2	2	3	3	3	4	4	2	3	2	2	2	2	2	2
17	2	2	3	3	4	3	3	1	1 (CM)	1	4	3	3	3	3	3	2	2	1	1 (CM)	1	1	2	2	2	2
18	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
19	1	2	2	2	2	1	1	2	2	3	5	4	4	4	4	4	4	4	2	1	1	1	1	1	1	3
20	0 (CM)	0 (CM)	0 (CM)	1	0	0	1	1	1	4	4	4	5	5	4	4	4	4	4	3	1	1	1	1	2	3
21	2	1	1	2	2	2	2	1	2	4	4	4	4	4	4	4	4	4	4	3	1	1	1	1	3	3
22	0 (CM)	0 (CM)	0 (CM)	0 (CM)	0 (CM)	0 (CM)	0 (CM)	0 (CM)	0 (CM)	2	2	2	3	2	2	2	2	2	2	1	1	1	1	1	2	3
23	1	1	1	1	1	1	2	2	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	3
24	2	1	1	2	2	3	3	3	2	1	1	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2
25	2	1	1	2	2	2	1	2	3	1	2	4	4	4	5	4	4	4	4	2	2	2	2	2	3	3
26	2	2	0	2	2	2	3	2	2	3	4	5	4	4	4	4	4	4	3	3	1	2	2	2	3	3
27	0 (CM)	2	1	1	1	1	2	2	2	2	2	2	3	3	5	4	4	4	4	4	3	1	1	1	2	3
28	2	2	0 (CM)	0 (CM)	1	1	1	1	1	1	1	1	1	4	2	3	3	3	2	1	2	0	1	1	2	2
29	2	2	2	1	2	1	2	2	2	1	1	1	1	1	2	3	3	3	3	3	1	1	1	1	2	2
30	1	1	1	2	2	2	1	2	2	2	2	3	3	3	2	3	3	2	2	1	1	1	1	1	2	2
AV	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	2	2	1	1	1	2	2	2
PK	4	4	4	4	4	4	5	4	4	4	5	5	5	5	5	5	5	5	5	4	4	2	3	4	4	5



WIND SPEED @ 10M  
METERS/SEC

CH-IRACT  
TRAILER AA23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	2	2	4	3	7	5	8	8	4	6	6	7	6	6	7	6	5	4	3	4	4	3	2	3	5	8
2	4	5	6	5	5	4	4	4	5	7	6	6	8	8	8	6	5	3	3	5	5	7	4	4	5	8
3	3	1	1	1	2	1	3	3	2	3	4	5	4	3	3	3	3	2	2	1	0	1	0	1	3	5
4	1	1	(CM)	0	0	0	2	2	3	4	3	3	3	3	3	3	4	4	0	0	1	1	1	1	3	5
5	1	1	2	2	2	2	2	3	0	8	7	7	7	7	5	6	6	4	3	2	3	2	2	3	2	4
6	5	1	1	0	(CM)	1	1	1	0	3	4	5	4	4	2	2	2	5	4	4	3	2	1	1	2	4
7	2	2	2	1	0	1	2	1	2	3	5	6	4	4	5	2	4	1	0	1	1	2	1	1	2	4
8	2	2	2	2	4	6	5	6	6	3	6	6	7	7	6	7	6	4	4	4	4	3	1	1	2	4
9	2	3	2	2	3	2	2	0	4	7	7	6	7	7	5	7	6	5	4	3	3	5	4	4	3	7
10	4	4	3	0	0	1	2	5	5	5	5	6	6	7	8	8	8	7	4	3	3	4	3	3	5	8
11	3	4	3	4	0	1	4	5	4	5	3	3	7	5	6	5	4	4	5	3	3	2	2	0	4	8
12	4	1	4	4	1	4	4	5	4	5	3	3	7	5	6	5	4	0	3	3	2	2	1	0	4	8
13	1	1	(CM)	1	1	1	0	0	1	1	2	2	2	2	2	2	1	3	3	1	1	0	1	1	1	3
14	1	1	0	0	2	1	5	4	4	4	4	4	4	4	4	7	6	5	4	3	3	1	2	2	3	5
15	1	1	2	2	2	2	1	1	2	2	2	2	2	2	2	6	5	3	3	3	3	2	2	0	4	8
16	2	2	3	1	1	2	1	1	4	4	4	4	4	4	7	6	4	1	3	3	3	1	2	0	4	8
17	1	1	1	2	1	0	1	1	2	2	5	4	4	3	5	4	1	3	3	4	1	1	0	3	5	8
18	0	1	1	0	1	1	2	0	5	6	6	6	5	5	6	6	4	6	3	3	3	2	2	0	3	5
19	2	2	1	0	1	1	1	3	1	7	6	6	7	7	7	6	4	6	3	3	4	2	4	0	3	5
20	0	1	1	0	1	1	2	0	5	6	6	6	5	5	6	6	4	6	3	3	3	4	2	0	3	5
21	1	1	1	1	1	2	1	3	1	8	7	6	7	7	7	6	4	6	3	3	4	2	4	0	3	5
22	1	1	1	1	2	2	1	3	1	2	2	3	3	3	3	2	2	2	2	1	1	1	1	1	3	5
23	1	1	1	1	1	1	1	1	2	1	1	1	2	3	1	2	2	2	4	1	1	1	1	1	3	5
24	1	1	1	0	1	1	1	1	3	4	5	6	6	7	7	6	5	4	4	3	3	4	3	3	3	5
25	0	1	1	1	2	2	1	1	2	1	1	1	2	3	1	2	2	2	4	1	1	1	1	1	3	5
26	2	4	3	3	5	4	3	4	5	6	7	7	8	8	7	6	5	6	5	4	3	2	2	3	3	5
27	4	1	0	1	0	0	0	1	1	1	6	3	5	6	5	5	5	5	5	4	4	2	4	3	3	5
28	1	1	2	1	2	2	2	2	1	2	3	3	2	3	2	3	3	3	2	1	2	2	(CM)	1	2	3
29	0	(CM)	1	1	0	1	0	1	1	1	0	1	1	1	4	3	4	4	3	1	2	2	(CM)	(CM)	2	3
30	1	1	0	1	1	1	0	1	1	2	3	2	3	2	3	3	3	3	2	2	2	2	0	1	2	3
AV	2	2	2	2	2	2	2	2	3	4	4	4	5	5	5	4	4	4	3	3	3	2	2	2	3	8
PK	5	5	6	6	7	6	8	8	6	8	7	7	8	8	8	8	8	7	7	5	5	7	5	4	3	8

WIND SPEED @ 30M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	3	2	4	4	10	8	12	11	5	7	8	10	8	8	10	8	7	6	5	6	6	4	2	4	7	12
2	7	8	8	8	8	8	6	5	7	9	8	8	6	4	10	9	8	4	4	7	7	10	5	5	8	11
3	4	1	2	2	4	5	5	4	5	4	4	7	5	4	4	4	4	3	3	2	1	1	0	1	4	8
4	1	1	(CM)	0	0	0	3	3	4	11	10	9	6	9	7	8	8	7	6	6	4	3	2	2	6	11
5	8	3	2	2	3	2	1	4	0	8	6	8	4	5	3	3	3	1	1	2	2	2	2	2	3	8
6	3	4	3	1	0	2	3	1	2	4	5	4	4	5	7	4	5	4	5	7	6	4	4	7	9	
7	3	3	3	3	7	8	7	8	8	8	9	8	9	9	8	9	8	8	7	7	7	8	7	7	10	
8	3	3	3	3	5	3	2	1	5	7	7	8	10	10	9	11	11	10	5	5	4	4	5	6	10	
9	5	5	6	1	1	1	3	7	6	7	7	9	9	9	10	11	11	10	5	5	4	4	5	6	11	
10	5	8	7	8	8	7	7	7	7	7	7	8	9	8	8	7	6	5	4	5	3	3	4	5	9	
11	5	8	7	8	8	7	7	7	6	7	7	8	9	8	8	7	6	5	4	5	3	3	4	5	11	
12	6	1	1	1	1	1	1	3	2	2	2	4	2	3	2	2	1	0	4	5	1	1	2	3	2	
13	3	1	(CM)	0	0	0	0	0	1	1	2	3	3	2	3	2	1	0	4	5	3	3	3	3	7	4
14	2	2	3	3	4	7	7	5	6	5	6	6	6	8	10	8	4	4	3	2	5	5	5	5	7	
15	2	2	3	3	4	7	7	5	6	5	6	6	6	8	10	8	4	4	3	2	5	5	5	5	7	
16	4	4	5	3	1	2	2	3	5	5	6	5	5	9	9	5	3	2	4	4	7	7	4	4	10	
17	2	4	5	1	1	1	1	3	3	5	6	5	6	9	9	5	3	2	4	4	7	7	4	4	9	
18	(CM)	2	1	1	1	1	1	0	1	2	6	6	6	6	7	4	4	4	4	5	3	2	1	2	8	
19	2	3	3	2	3	2	5	4	4	10	4	8	8	9	9	9	9	8	4	5	5	3	2	1	10	
20	0	2	0	1	1	1	1	1	8	10	9	8	8	9	8	8	8	8	8	6	7	7	6	3	10	
21	2	3	1	1	3	4	4	4	7	8	8	8	7	7	9	8	6	8	7	2	3	3	2	0	9	
22	1	2	2	1	1	2	1	1	2	3	3	3	4	3	4	3	2	2	3	1	1	1	1	1	4	
23	1	2	2	1	1	1	1	1	1	2	2	2	4	2	2	3	3	2	3	4	2	1	1	1	4	
24	0	0	0	0	1	1	1	1	3	6	7	8	8	9	9	8	7	8	6	4	5	5	5	5	9	
25	0	0	0	0	8	6	5	4	6	8	8	9	10	10	10	8	9	5	5	5	5	6	6	5	9	
26	4	6	6	6	1	0	1	1	1	8	8	9	8	8	7	7	7	7	7	7	4	3	4	4	8	
27	0	4	1	3	3	3	2	2	1	2	2	4	3	3	3	4	4	4	2	2	2	0	1	1	4	
28	2	0	3	3	1	3	2	2	1	2	2	4	3	3	3	4	4	4	3	2	2	0	1	1	5	
29	1	1	1	1	0	1	1	1	1	1	0	1	1	2	5	4	4	5	4	2	0	1	0	0	2	
30	0	1	0	0	0	1	1	1	1	3	3	3	4	3	3	4	3	4	3	3	3	4	0	0	2	
AV	3	3	3	2	3	3	3	3	4	5	6	6	6	6	6	6	5	5	5	4	4	4	3	3	4	
PK	8	8	8	8	10	8	12	11	8	11	10	10	11	11	10	11	11	10	8	7	7	10	7	6	12	

WIND SPEED @ 60M  
METERS/SEC

CB-TRACT  
TRAILER AA23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	3	4	4	4	13	11	14	13	6	7	8	11	9	9	11	9	8	7	6	7	7	4	3	5	8	14
2	8	11	10	10	9	9	8	6	6	10	8	9	12	13	11	9	8	5	6	8	8	11	6	5	8	13
3	5	2	7	2	6	6	6	5	5	6	8	6	4	4	4	5	4	4	4	4	2	2	1	2	9	8
4	2	3	3	3	4	3	3	3	3	4	7	7	5	5	5	6	5	0	5	1	1	2	1	1	3	7
5	9	4	1	2	1	1	3	4	4	9	4	4	4	10	8	4	9	8	6	4	5	4	1	8	4	8
6	3	3	2	0	0	2	1	2	2	0	11	10	10	7	3	4	4	2	1	3	2	4	2	2	6	12
7	3	5	3	1	0	2	3	1	1	3	7	8	6	7	7	5	4	2	7	7	9	6	1	3	3	8
8	4	4	4	4	8	10	3	9	9	4	5	5	5	5	7	10	6	5	7	9	8	2	5	4	9	10
9	2	7	8	8	7	2	2	1	1	7	9	9	10	10	9	9	9	8	8	6	8	8	7	6	8	11
10	5	8	9	2	2	0	4	8	8	8	7	9	10	10	11	12	12	11	6	6	4	4	6	6	7	12
11	7	9	9	9	9	9	9	8	8	7	7	8	9	8	8	8	7	5	5	6	4	3	2	3	7	9
12	8	9	1	2	1	1	2	3	3	2	2	4	2	3	2	2	2	5	4	3	2	1	2	3	2	4
13	4	2	0	1	0	0	0	3	5	1	3	4	4	3	3	2	5	1	4	3	1	6	8	5	3	8
14	3	4	3	4	4	8	8	5	5	6	7	7	8	9	11	9	8	6	5	2	5	6	6	6	3	11
15	3	4	3	4	4	8	8	4	4	6	6	7	8	10	9	9	8	2	5	4	2	5	6	5	6	11
16	6	6	7	4	2	2	3	4	4	6	6	5	7	10	9	5	3	2	4	4	9	9	7	4	5	10
17	4	1	1	3	2	1	1	1	1	1	7	6	6	6	7	5	4	4	4	5	6	2	1	4	4	7
18	0	2	3	3	3	3	0	0	5	2	4	2	4	4	7	2	1	4	8	4	7	6	1	2	4	8
19	3	4	2	3	3	3	6	5	5	11	11	9	10	10	10	10	10	6	5	0	7	3	4	3	3	11
20	1	3	0	2	1	1	2	1	1	11	10	9	10	10	9	8	8	9	8	8	8	8	1	4	6	11
21	3	3	1	1	4	6	5	5	5	7	8	7	8	8	10	9	7	8	8	2	4	3	3	1	5	10
22	1	3	3	2	2	2	2	1	1	2	3	4	4	3	4	3	3	3	3	2	4	4	1	1	2	4
23	1	3	2	1	1	1	1	1	1	1	2	2	3	2	2	3	3	2	3	3	2	1	1	1	3	4
24	1	3	1	1	1	1	2	1	1	4	2	4	3	4	3	3	3	3	6	6	5	5	4	2	3	6
25	3	2	2	2	1	1	2	3	5	7	8	10	11	11	9	9	8	7	7	5	6	6	8	8	9	9
26	7	8	8	8	8	6	6	5	1	2	2	4	8	9	11	9	10	8	7	7	6	6	6	4	8	11
27	6	5	3	4	2	1	1	2	1	2	2	4	8	4	8	7	7	8	7	8	5	4	3	4	5	9
28	3	1	3	4	4	3	2	2	1	2	3	4	7	4	8	4	4	5	7	4	3	1	1	1	3	5
29	1	1	2	1	1	1	0	1	1	1	1	1	1	2	6	4	4	6	5	3	1	0	0	1	2	6
30	0	1	1	1	1	1	2	2	2	3	4	3	4	3	4	4	4	4	4	4	4	4	1	0	2	4
AV	4	4	3	3	4	4	4	4	4	4	6	6	7	7	7	6	6	5	5	5	4	4	4	3	5	14
PK	9	11	10	10	13	11	14	13	13	9	11	11	12	13	11	12	12	11	8	8	9	11	8	8	8	14

C-B TRACT  
MRI AD42  
April, 1981

WIND SPEED @10M

DATA NOT AVAILABLE AT REPORT TIME

WIND SPEED @10M

C-B TRACT  
MRI AD56  
April, 1981

DATA NOT AVAILABLE AT REPORT TIME



WIND DIRECTION @10M  
DEGREES

CB-TRACT  
TRAILER AB20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOOR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PHEV
1	133	132	129	117	111	131	71	94	118	129	164	175	170	182	194	189	197	219	105	120	133	123	134	130	141
2	134	128	108	105	120	123	123	127	150	193	179	203	180	193	195	210	192	260	225	153	165	230	255	265	174
3	(CM)	165	(CM)	(CM)	110	(CM)	(CM)	300	235	305	287	290	322	330	345	300	310	300	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	300
4	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	285	285	330	0	335	350	15	(VA)	180	(CM)	(CM)	110	120	115	130	17
5	135	135	130	130	125	130	125	125	110	95	115	115	230	225	150	155	210	180	120	95	115	115	120	120	134
6	95	95	(CM)	95	125	(CM)	(CM)	110	90	165	190	190	215	225	230	215	225	210	225	(CM)	(CM)	330	110	120	165
7	110	100	105	115	120	110	85	(CM)	105	115	300	330	325	315	310	315	345	295	100	(VA)	280	105	(VA)	(CM)	57
8	280	275	280	(IM)	(IM)	(IM)	(IM)	(IM)	95	60	315	250	265	280	250	215	255	265	255	135	95	(CM)	100	115	251
9	120	120	125	115	115	95	(IM)	(IM)	165	170	165	165	195	220	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	146
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	180	180	195	215	195	210	200	210	195	125	105	90	100	120	95	164
11	95	(CM)	85	95	100	110	(CM)	95	185	235	245	230	220	220	235	225	240	240	280	90	95	90	100	85	159
12	100	85	85	90	85	80	80	90	165	170	210	210	210	230	245	185	230	255	(IM)	(IM)	100	120	(CM)	110	143
13	105	(CM)	(CM)	(CM)	125	(CM)	110	130	265	315	310	300	320	330	310	(VA)	340	325	350	100	120	110	(CM)	(CM)	359
14	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	120	120	110	295	305	280	300	335	345	335	330	85	60	90	105	120	90	100	49
15	(CM)	(CM)	(CM)	(CM)	100	100	105	105	165	180	195	215	240	215	190	195	220	315	(VA)	(IM)	(IM)	(IM)	(IM)	(IM)	179
16	95	95	125	110	130	130	130	130	120	195	215	240	255	260	255	265	300	30	110	120	110	95	105	90	135
17	105	105	120	125	125	125	120	240	(CM)	215	255	240	245	240	240	225	240	230	(CM)	95	120	120	135	105	168
18	95	110	120	130	(CM)	(CM)	95	110	255	275	165	270	285	270	285	270	(CM)	270	210	80	225	25	70	(CM)	200
19	105	105	90	80	120	105	105	80	90	140	150	135	140	200	230	225	225	235	235	240	270	105	100	110	150
20	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	130	165	180	195	180	160	210	245	235	240	235	255	185	(VA)	105	100	110	173
21	105	110	105	120	120	115	110	95	270	265	275	270	285	280	275	285	265	270	270	15	10	105	(CM)	(CM)	261
22	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	(CM)	275	285	310	345	335	45	285	330	340	30	75	120	115	110	95	7
23	105	95	100	95	93	90	120	125	120	270	285	315	295	255	270	290	300	0	20	90	(CM)	(CM)	95	90	70
24	105	90	85	110	105	130	125	125	120	300	285	285	280	275	285	(M)	270	265	260	273	(CM)	(CM)	120	90	173
25	105	90	105	105	110	115	110	135	125	90	200	190	215	235	230	225	255	230	215	175	110	110	115	120	149
26	90	90	90	90	105	120	115	120	110	170	165	180	170	180	195	180	185	195	215	195	(CM)	(CM)	(CM)	(CM)	149
27	(CM)	93	105	100	100	103	105	110	125	(CM)	345	270	195	245	205	240	235	255	285	285	300	330	315	260	231
28	290	(CM)	(CM)	(CM)	105	100	95	100	75	285	260	275	275	285	270	265	285	335	340	330	45	90	90	110	337
29	120	115	125	110	100	100	105	125	125	305	305	285	290	315	285	315	300	300	275	15	60	(CM)	90	95	48
30	105	95	100	105	105	120	95	130	115	270	330	280	300	320	325	305	5	340	0	75	(CM)	(CM)	(CM)	100	50
PV	108	108	108	107	111	112	108	116	134	220	241	244	251	256	256	245	260	264	255	106	106	103	107	107	145

WIND DIRECTION @ 10M  
DEGREES

CB-TRACT  
TRAILER AA23  
APR 1981  
OCCIDENTIAL OIL SHALE INC.

HOOR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	95	90	70	95	187	170	187	185	188	190	198	197	202	205	205	216	219	222	205	188	189	145	114	150	177
2	175	183	192	191	194	193	186	186	201	210	209	225	213	210	210	220	219	254	219	214	187	214	241	239	207
3	205	222	231	253	207	215	235	243	273	315	342	333	357	1	347	339	332	332	328	7	283	291	222	236	287
4	226	235	254	265	276	284	307	303	272	295	308	336	19	338	318	350	24	124	53	71	165	201	212	189	289
5	223	208	(CM)	217	235	94	103	91	169	156	159	196	214	207	178	187	215	222	197	145	183	79	90	182	177
6	176	139	69	121	133	135	108	176	201	205	215	216	223	229	224	221	223	222	212	207	290	293	273	259	204
7	238	231	225	202	(CM)	178	297	287	150	232	257	268	330	327	346	356	348	158	51	305	256	216	287	278	268
8	281	306	279	205	266	268	242	180	172	224	262	252	254	241	230	231	228	246	214	200	207	233	245	197	236
9	172	154	173	140	187	183	185	198	201	203	196	210	221	229	218	221	227	229	213	198	196	189	160	172	196
10	167	186	176	176	171	158	83	95	202	216	221	227	212	215	225	227	222	209	166	201	178	179	169	174	190
11	188	199	208	7	238	107	208	221	218	215	216	209	221	232	226	227	231	229	239	217	215	215	205	194	216
12	197	210	208	211	208	206	206	202	211	207	207	214	232	225	235	218	223	230	208	190	183	144	103	170	204
13	212	19	45	82	164	185	282	226	251	329	312	317	356	343	329	345	325	11	350	63	159	318	239	239	317
14	233	171	(CM)	231	233	223	251	19	317	341	343	242	257	218	217	295	14	53	34	211	215	195	192	192	244
15	148	151	199	194	177	185	191	194	204	221	211	232	220	223	223	225	239	299	262	183	121	202	208	199	204
16	208	201	205	153	130	126	113	188	202	215	227	252	243	248	257	287	325	68	124	192	203	203	198	143	198
17	118	72	73	79	86	70	83	36	238	215	225	252	236	233	234	239	236	235	239	210	216	143	243	341	207
18	199	124	136	156	189	265	240	97	6	31	86	21	348	4	313	136	11	255	199	174	212	216	192	194	182
19	145	163	108	113	109	130	172	145	171	190	187	177	193	228	207	208	215	228	235	228	240	161	204	223	184
20	248	175	237	204	209	148	199	73	197	192	209	208	208	218	234	230	228	237	233	231	214	214	211	245	213
21	250	210	185	189	210	201	203	218	241	259	258	256	251	257	295	301	248	268	273	314	34	50	49	180	245
22	238	336	331	276	231	229	255	(CM)	19	344	341	332	337	15	351	357	337	325	36	98	202	158	223	204	313
23	225	180	155	201	223	238	109	45	112	29	327	332	326	21	14	1	0	7	14	57	184	222	197	215	343
24	217	204	199	158	201	170	122	71	226	276	297	347	341	316	3	310	309	269	264	215	211	199	270	111	244
25	100	61	95	77	101	58	114	114	208	226	215	224	221	226	231	241	241	230	219	211	202	181	195	195	188
26	194	188	197	204	189	179	176	191	211	217	217	219	223	212	217	209	221	218	212	200	209	207	205	207	205
27	214	245	260	224	194	204	143	62	67	65	4	233	249	231	211	217	246	304	321	313	338	352	9	355	268
28	318	232	268	272	261	250	260	294	321	339	350	323	330	317	324	336	343	349	329	278	251	197	220	196	293
29	171	(CM)	183	225	131	245	161	285	331	21	258	8	4	15	326	346	350	309	332	16	219	217	(CM)	(CM)	306
30	237	233	148	208	239	229	270	292	323	11	16	333	328	339	9	352	17	23	12	56	152	166	304	282	315
PV	202	190	189	189	195	189	190	180	219	242	249	256	261	259	260	263	273	259	251	204	206	198	213	205	233

WIND DIRECTION @ 30M  
DEGREES

CB-IRACI  
TRAILER AAZJ  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOOR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	112	122	72	94	179	168	178	177	181	183	191	191	196	199	199	211	213	217	206	182	185	130	121	162	173
2	166	174	184	182	185	183	177	176	194	204	203	219	206	204	204	213	214	247	213	210	180	209	235	233	200
3	201	217	225	244	202	211	230	237	269	312	338	329	351	355	341	335	328	328	331	323	324	323	325	324	298
4	324	325	324	324	324	324	323	310	267	290	303	331	14	331	313	344	17	67	21	55	110	153	186	167	334
5	190	187	(CM)	215	202	84	105	99	159	147	150	188	205	202	170	181	208	214	188	145	177	82	90	176	167
6	168	156	73	121	136	124	104	170	197	199	209	211	216	222	219	216	219	217	208	199	279	301	266	278	199
7	249	243	239	221	96	152	297	291	135	227	249	261	323	321	341	351	341	150	25	309	264	213	270	281	271
8	284	301	282	211	270	271	242	165	163	219	257	248	249	236	225	224	222	240	210	196	199	227	255	207	234
9	145	139	158	154	183	180	181	191	194	197	190	204	214	223	211	214	221	223	207	192	190	183	172	169	189
10	167	176	170	166	156	156	95	122	195	210	215	221	205	209	219	220	215	204	179	199	171	165	160	165	183
11	179	198	202	317	289	92	208	217	213	209	210	204	215	225	221	222	226	223	235	215	183	149	213	192	215
12	192	208	203	208	205	200	197	195	206	201	202	207	226	220	229	213	216	225	205	180	183	149	105	203	201
13	203	357	10	71	141	188	264	225	248	322	308	310	349	338	329	341	321	13	347	37	106	4	299	261	326
14	262	213	(CM)	83	249	254	325	0	318	335	338	237	251	209	211	291	12	49	27	194	208	191	186	184	258
15	146	146	191	193	169	176	183	187	200	216	203	227	215	216	217	220	233	291	256	182	133	211	197	196	199
16	202	201	200	175	143	124	161	191	194	211	220	248	238	242	252	281	322	58	115	191	202	195	191	177	199
17	166	92	97	95	124	88	104	19	232	209	220	245	231	226	228	233	230	231	236	214	211	183	233	301	203
18	(CM)	108	126	128	139	322	270	84	5	29	80	19	343	358	307	130	7	248	192	166	207	211	189	187	126
19	136	156	106	114	101	133	163	138	162	183	179	169	186	222	201	201	209	222	231	223	236	152	174	231	177
20	77	130	275	253	241	141	168	94	189	184	201	203	202	211	228	225	222	231	229	228	213	213	209	228	206
21	249	215	180	203	203	199	191	210	238	254	253	251	245	252	291	297	242	263	269	313	28	40	41	129	242
22	261	341	340	324	259	245	272	338	16	338	334	324	331	7	346	352	331	319	31	61	158	133	217	137	330
23	202	115	111	90	228	264	107	54	96	27	322	326	320	13	12	1	353	3	12	39	139	159	199	209	40
24	202	196	174	106	199	172	127	78	219	268	292	338	336	311	356	303	305	265	260	214	203	199	209	141	229
25	199	229	143	231	105	43	68	104	204	221	209	219	215	221	226	236	235	224	215	208	196	177	188	189	200
26	191	183	189	185	179	165	163	183	204	211	212	214	217	206	212	203	215	213	210	193	205	200	193	181	197
27	202	227	308	235	228	27	138	65	58	61	1	227	243	224	205	212	241	300	318	312	336	351	10	354	287
28	339	295	305	292	275	266	262	287	319	335	345	316	325	312	318	329	336	342	324	282	266	230	230	208	300
29	173	82	133	265	117	282	210	285	329	13	249	354	356	3	319	337	342	304	330	17	232	219	(CM)	15	319
30	264	243	275	217	326	245	246	284	322	5	8	329	323	332	2	346	11	19	6	44	119	134	71	(CM)	330

PV	197	187	185	188	189	183	187	175	212	236	243	250	255	253	254	257	267	257	251	208	196	187	201	201	229
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WIND DIRECTION @ 60M  
DEGREES

CH-FRACT  
TRAILER AA23  
APR 1981  
OCCIDENTIAL OIL SHALE INC.

HOURLY (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	150	167	102	123	190	180	188	188	191	194	199	199	204	208	208	219	220	224	222	195	199	160	172	191	189
2	182	186	193	195	194	191	187	186	204	212	211	225	214	211	211	220	221	252	222	219	191	217	240	239	209
3	209	226	233	247	212	220	237	245	274	324	349	339	359	6	349	340	336	333	333	333	332	333	332	333	306
4	333	333	333	333	332	332	332	322	306	306	312	340	24	340	323	353	23	42	21	56	102	145	180	166	347
5	196	198	188	192	195	195	147	153	170	160	164	194	211	210	179	192	215	219	199	170	189	110	127	191	183
6	185	182	103	149	165	145	122	184	206	208	216	218	223	229	225	223	226	224	218	216	284	317	320	320	210
7	274	270	278	265	71	156	291	295	163	233	253	269	333	330	349	357	350	158	19	327	299	214	281	304	291
8	303	312	302	240	276	289	260	171	170	227	263	255	256	245	231	231	228	247	218	210	210	235	277	228	245
9	145	147	174	186	196	194	196	201	204	204	199	211	221	230	219	221	228	230	216	207	206	198	168	192	201
10	190	197	194	187	168	176	141	166	203	218	222	226	212	217	226	227	222	211	189	213	191	181	179	178	197
11	194	215	219	305	292	126	223	226	221	217	217	212	222	232	229	228	233	231	242	230	227	226	228	209	225
12	210	223	219	222	221	217	211	205	212	208	211	215	232	228	235	219	222	233	223	202	202	177	127	219	213
13	220	307	352	81	159	220	259	234	256	329	319	318	358	347	337	342	328	21	358	35	83	24	345	298	331
14	301	263	236	104	146	348	283	(CM)	331	346	346	246	260	216	220	296	20	63	37	193	223	201	196	192	260
15	169	166	199	206	182	188	192	195	208	221	210	234	222	223	224	226	240	299	266	195	183	225	214	214	211
16	221	219	215	204	194	159	198	207	202	219	227	253	245	249	260	287	330	64	131	207	215	207	204	195	216
17	192	192	196	190	197	188	173	311	238	217	227	251	237	232	234	238	238	236	244	231	231	214	208	304	224
18	38	112	136	132	135	(CA)	299	81	17	42	89	31	351	6	317	141	4	260	204	180	217	220	199	198	110
19	155	170	132	136	117	156	174	154	174	192	188	179	196	229	208	209	217	228	237	232	245	176	180	246	189
20	92	121	343	270	268	169	179	143	196	192	209	210	208	218	235	232	228	239	236	238	226	226	224	237	216
21	262	241	210	240	225	222	202	216	245	261	258	258	251	259	297	303	250	270	276	318	37	49	50	109	256
22	311	353	356	353	328	289	305	330	21	344	341	333	339	14	355	358	337	329	42	63	141	139	159	130	353
23	109	113	95	35	279	278	225	68	98	44	334	337	330	17	18	11	0	13	25	47	130	161	197	219	34
24	189	204	208	124	212	200	192	186	229	286	302	349	344	318	2	311	310	275	269	231	227	219	217	208	244
25	212	211	209	230	182	298	44	113	214	228	217	225	220	228	233	243	241	231	223	223	211	198	202	202	218
26	202	198	204	198	192	178	170	192	211	218	220	220	224	214	219	210	221	220	219	210	219	215	206	195	207
27	208	234	305	266	244	20	121	69	68	72	8	232	249	232	214	218	250	306	324	319	349	5	23	7	300
28	359	10	340	320	306	304	280	300	330	346	350	328	332	323	326	338	343	352	333	297	284	274	255	230	319
29	182	112	113	293	196	320	234	300	341	24	249	5	4	6	329	346	351	313	339	24	13	250	221	352	329
30	63	274	283	258	303	274	269	281	337	11	15	341	335	342	11	355	21	29	16	52	116	132	139	90	351
PV	200	207	214	215	209	213	214	204	221	243	250	257	262	261	262	263	274	266	260	226	212	202	207	218	243

WIND DIRECTION @10M

C-B TRACT  
MRI AD42  
April, 1981

DATA NOT AVAILABLE AT REPORT TIME



WIND DIRECTION @10M

C-B TRACT  
MRI AD56  
April, 1981

DATA NOT AVAILABLE AT REPORT TIME

WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
10 METER LEVEL

CB-TRACT  
TRAILER AB20  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	VECTOR DIR VEL
1	133	132	129	117	111	131	71	94	118	129	164	175	170	182	194	189	197	219	105	120	133	123	134	130	146
2	134	128	108	105	120	123	123	127	150	193	179	203	180	193	195	210	192	260	225	153	165	230	255	285	171
3	***	165	***	***	110	***	***	300	235	305	287	290	322	330	345	300	310	300	***	***	***	***	***	***	301
4	***	***	***	***	***	***	***	***	***	285	285	330	0	335	350	15	***	180	***	***	110	120	115	130	360
5	135	135	130	130	125	130	125	125	110	95	115	115	230	225	150	155	210	180	120	95	115	115	120	120	130
6	95	95	***	95	125	***	***	***	110	165	190	190	215	225	230	215	225	210	225	***	***	330	110	120	189
7	110	100	105	115	120	110	85	***	105	115	300	330	325	315	310	315	345	295	100	***	280	105	***	***	15
8	280	275	280	***	***	***	***	***	95	60	315	250	265	280	250	215	255	265	255	135	95	***	100	115	255
9	120	120	125	115	115	95	***	***	165	170	165	165	195	220	***	***	***	***	***	***	***	***	***	***	159
10	***	***	***	***	***	***	***	***	***	180	180	195	215	195	210	200	210	195	125	105	90	100	120	95	186
11	95	***	85	95	100	110	***	95	185	235	245	230	220	220	235	225	240	240	280	90	95	90	100	85	218
12	100	85	85	90	85	80	80	90	165	170	210	210	210	230	245	185	230	255	***	***	100	120	***	110	182
13	105	***	***	***	125	***	110	130	265	315	310	300	320	330	310	***	340	325	350	100	120	110	***	***	333
14	***	***	***	***	***	***	120	120	110	295	305	280	300	335	345	335	330	85	60	90	105	120	90	100	33
15	***	***	***	***	100	100	105	105	165	180	195	215	240	215	190	195	220	315	***	***	***	***	***	***	194
16	95	95	125	110	130	130	130	130	120	195	215	240	255	260	255	265	300	30	110	120	110	95	105	90	151
17	105	105	120	125	125	125	120	240	***	215	255	240	245	240	240	225	240	230	***	95	120	120	135	105	172
18	95	110	120	130	***	***	95	110	255	275	165	270	285	270	285	270	240	270	210	80	225	25	70	***	226
19	105	105	90	80	120	105	105	80	90	140	150	135	140	200	230	225	225	235	235	240	270	***	***	***	161
20	***	***	***	105	***	110	120	130	165	180	195	180	180	210	245	235	240	235	255	185	***	105	100	110	200
21	105	110	105	120	120	115	110	95	270	265	270	270	285	280	275	285	265	270	270	15	10	105	***	***	276
22	***	***	***	***	***	***	***	***	***	275	285	310	345	335	45	285	330	340	30	75	120	115	110	95	345
23	105	95	100	95	93	90	120	125	120	270	285	315	295	255	270	290	300	0	20	90	***	***	95	90	39
24	105	90	85	110	105	130	125	125	120	300	285	285	280	275	285	***	270	265	260	273	***	***	120	90	176
25	105	90	105	105	110	115	110	135	125	90	200	190	215	235	230	225	255	230	215	175	110	110	115	120	179
26	90	90	90	90	105	120	115	120	110	170	165	180	170	180	195	180	185	195	215	195	***	***	***	***	162
27	***	93	105	100	100	103	105	110	125	***	345	270	195	245	205	240	235	255	285	285	300	330	315	260	242
28	290	***	***	***	105	100	95	100	75	285	260	275	275	285	270	265	285	335	340	330	45	90	90	110	298
29	120	115	125	110	100	100	105	125	125	305	305	285	290	315	285	315	300	300	275	15	60	***	90	95	14
30	105	95	100	105	105	120	95	130	115	270	330	280	300	320	325	305	5	340	0	75	***	***	***	100	4
VD	114	112	113	109	114	116	113	119	139	203	221	230	234	242	244	236	253	262	257	89	104	110	113	111	166
VV	1.5	1.5	1.6	1.8	2.0	1.8	1.9	1.6	1.3	1.1	1.4	1.7	1.8	2.2	2.2	2.3	2.0	1.3	0.6	0.5	0.7	0.9	1.2	1.3	0.7

TOTAL NUMBER OF OBSERVATIONS = 590

NOTE: \*\*\* = MISSING DATA

WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
10 METER LEVEL

CB-TRACT  
TRAILER AA23  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																								VECTOR	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL
1	95	90	70	95	187	176	187	185	188	190	198	197	202	205	205	216	219	222	205	188	189	145	114	150	188	4.0
2	175	183	192	191	194	193	186	186	201	210	209	225	213	210	210	220	219	254	219	214	187	214	241	239	207	5.2
3	205	222	231	253	207	215	235	243	273	315	342	333	357	1	347	339	332	332	328	7	283	291	222	236	290	1.6
4	226	235	254	265	276	284	307	303	272	295	308	336	19	338	318	350	24	124	53	71	165	201	212	189	314	1.4
5	223	208	**	217	235	94	103	91	169	156	159	196	214	207	178	187	215	222	197	145	183	79	90	182	178	1.8
6	176	139	69	121	133	135	108	176	201	205	215	216	223	229	224	221	223	222	212	207	290	293	273	259	211	3.3
7	238	231	225	202	**	178	297	287	150	232	257	268	330	327	346	356	348	158	51	305	256	216	287	278	280	1.3
8	281	306	279	205	266	268	242	180	172	224	262	252	254	241	230	231	228	246	214	200	207	233	245	197	236	2.4
9	172	154	173	140	187	183	185	198	201	203	196	210	221	229	218	221	227	229	213	198	196	189	180	172	202	4.7
10	167	186	176	176	171	158	83	95	202	216	221	227	212	215	225	227	222	209	186	201	178	179	169	174	200	3.9
11	188	199	208	7	238	107	208	221	218	215	216	209	221	232	226	227	231	229	239	217	215	215	205	194	219	4.1
12	197	210	208	211	208	206	206	202	211	207	207	214	232	225	235	218	223	230	208	190	183	144	103	170	212	3.8
13	212	19	45	82	164	185	282	226	251	329	312	317	356	343	329	345	325	11	350	63	159	318	239	239	308	0.6
14	233	171	**	231	233	223	251	19	317	341	343	242	257	218	217	295	14	53	34	211	215	195	192	192	230	0.7
15	148	151	199	194	177	185	191	194	204	221	211	232	220	223	223	225	239	299	262	183	121	202	208	199	215	3.2
16	208	201	205	153	130	126	113	188	202	215	227	252	243	248	257	287	325	68	124	192	208	203	198	143	219	2.1
17	118	72	73	79	86	70	83	36	238	215	225	252	236	233	234	239	236	235	239	216	216	143	243	341	225	1.5
18	199	124	136	156	189	265	240	97	6	31	86	21	348	4	313	136	11	255	199	174	212	216	192	194	204	0.6
19	145	163	108	113	109	130	172	145	171	190	187	177	193	228	207	208	215	228	235	228	240	161	204	223	195	3.4
20	248	175	237	204	209	148	199	73	197	192	209	208	208	218	234	230	228	237	233	231	214	214	211	245	216	3.7
21	250	210	185	189	210	201	203	218	241	259	258	256	251	257	295	301	248	268	273	314	34	50	49	180	261	2.6
22	238	336	331	276	231	229	255	**	19	344	341	332	337	15	351	357	337	325	36	98	202	158	223	204	328	0.9
23	225	180	155	201	223	238	109	45	112	29	327	332	326	21	14	1	0	7	14	57	184	222	197	215	340	0.4
24	217	204	199	158	201	170	122	71	226	276	297	347	341	316	3	310	309	269	264	215	211	199	270	111	262	0.7
25	100	61	95	77	101	58	114	114	208	226	215	224	221	226	231	241	241	230	219	211	202	181	195	195	215	2.7
26	194	188	197	204	189	179	176	191	211	217	217	219	223	212	217	209	221	218	212	200	209	207	205	207	209	4.5
27	214	245	260	224	194	204	143	62	67	65	4	233	249	231	211	217	246	304	321	313	338	352	9	355	268	1.6
28	318	232	268	272	261	250	260	294	321	339	350	323	330	317	324	336	343	349	329	278	251	193	220	196	305	1.4
29	171	**	183	225	131	245	161	285	331	21	258	8	4	15	326	346	350	309	332	16	219	217	**	**	323	0.9
30	237	233	148	208	239	229	270	292	323	11	16	333	328	339	9	352	17	23	12	56	152	166	304	282	349	0.8
VD	198	196	193	181	192	188	186	198	212	220	228	237	237	239	242	243	246	250	240	210	207	199	203	203	221	
VV	1.5	1.3	1.1	1.1	1.6	1.6	1.4	1.4	2.3	2.6	2.7	3.0	3.1	3.4	3.3	2.8	2.6	2.3	1.7	1.7	2.0	1.7	1.4	1.4		1.9

TOTAL NUMBER OF OBSERVATIONS = 713

NOTE: \*\*\* = MISSING DATA



WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
30 METER LEVEL

CB-TRACT  
TRAILER AA23  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	VECTOR DIR VEL
1	112	122	72	94	179	168	178	177	181	183	191	191	196	199	199	211	213	217	206	182	185	130	121	162	183
2	166	174	184	182	185	183	177	176	194	204	203	219	206	204	204	211	214	247	213	210	180	209	235	233	200
3	201	217	225	244	202	211	230	237	269	312	338	329	351	355	341	335	328	328	331	323	324	323	325	267	286
4	324	325	324	324	324	324	323	310	267	290	303	331	14	331	313	344	17	67	21	55	110	153	186	167	2.2
5	190	187	***	215	202	84	105	99	159	147	150	188	205	202	170	181	208	214	188	145	177	82	90	176	171
6	168	156	73	121	136	124	104	170	197	199	209	211	216	222	219	216	219	217	208	199	279	301	286	278	205
7	249	243	239	221	96	152	297	291	135	227	249	261	323	321	341	351	341	150	25	309	264	213	270	281	179
8	284	301	282	211	270	271	242	165	163	219	257	248	249	236	225	224	222	240	210	196	199	227	255	207	232
9	145	139	158	154	183	180	181	191	194	197	190	204	214	223	211	214	221	223	207	192	190	183	172	169	195
10	167	176	170	166	156	156	95	122	195	210	215	221	205	209	219	220	215	204	179	199	171	165	160	165	193
11	179	198	202	317	289	92	208	217	213	209	210	204	215	225	221	222	226	223	235	215	213	214	213	192	215
12	192	208	203	208	205	200	197	195	206	201	202	207	226	220	229	213	216	225	205	188	183	149	105	203	206
13	208	357	10	71	141	188	264	225	248	322	308	310	349	338	329	341	321	13	347	37	106	4	299	261	316
14	262	213	***	83	249	254	325	0	318	335	338	237	251	209	211	291	12	49	27	194	208	191	186	184	224
15	146	146	191	193	169	176	183	187	200	216	203	227	215	216	217	220	233	291	256	182	133	211	197	196	208
16	202	201	200	175	143	124	161	191	194	211	220	248	238	242	252	281	322	58	115	191	202	195	191	177	212
17	166	92	97	95	124	88	104	19	232	209	220	245	231	226	228	233	230	231	236	214	211	183	233	301	221
18	***	108	126	128	139	322	270	84	5	29	80	19	343	358	307	130	7	248	192	166	207	211	189	187	189
19	136	156	106	114	101	133	163	138	162	183	179	169	186	222	201	201	209	222	231	223	236	152	174	231	189
20	77	130	275	253	241	141	168	94	189	184	201	203	202	211	228	225	222	231	229	228	213	213	209	228	211
21	249	215	180	203	203	199	191	210	238	254	253	251	245	252	291	297	242	263	269	313	28	40	41	129	254
22	261	341	340	324	259	245	272	338	16	338	334	324	331	7	346	352	331	319	31	61	158	133	217	137	339
23	202	115	111	90	228	264	107	54	96	27	322	326	320	13	12	1	353	3	12	39	139	159	199	209	6
24	202	196	174	106	199	172	127	78	219	268	292	338	336	311	356	303	305	265	260	214	203	199	209	141	248
25	199	229	143	231	105	43	68	104	204	221	209	219	215	221	226	236	235	224	215	208	196	177	188	189	212
26	191	183	189	185	179	165	163	183	204	211	212	214	217	206	212	203	215	213	210	198	205	200	193	181	200
27	202	227	308	235	228	27	138	65	58	61	1	227	243	224	205	212	241	300	318	312	336	351	10	354	264
28	339	295	305	292	275	266	262	287	319	335	345	316	325	312	318	329	336	342	324	282	266	230	230	208	308
29	173	82	133	265	117	282	210	285	329	13	249	354	356	3	319	337	342	304	330	17	232	219	***	15	328
30	264	243	275	217	326	245	246	284	322	5	8	329	323	332	2	346	11	19	6	44	119	134	71	***	357
VD	190	191	189	179	185	182	183	192	205	214	222	232	231	232	236	237	239	244	235	207	201	192	198	196	215
VV	2.1	2.0	1.7	1.4	2.1	2.0	2.1	2.0	3.1	3.4	3.5	4.1	4.2	4.5	4.5	3.9	3.5	3.2	2.4	2.6	3.0	2.5	2.1	2.0	2.6

TOTAL NUMBER OF OBSERVATIONS = 715

NOTE: \*\*\* = MISSING DATA

WIND DIRECTION AND  
VECTOR AVERAGE VELOCITY (DEG & MPS)  
60 METER LEVEL

CB-TRACT  
THAILER AA23  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

DAY	HOUR (LOCAL STANDARD TIME)																								VECTOR		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	DIR	VEL	
1	150	167	102	123	190	180	188	188	191	194	199	199	204	208	208	219	220	224	222	195	199	160	172	191	195	195	7.1
2	182	186	193	195	194	191	187	186	204	212	211	225	214	211	211	220	221	252	222	222	191	217	240	239	208	208	8.4
3	209	226	233	247	212	220	237	245	274	324	349	339	359	6	349	340	336	333	333	332	333	333	332	333	293	293	2.7
4	333	333	333	333	332	332	332	322	306	306	312	340	24	340	323	353	23	42	21	56	102	145	180	166	338	2.7	
5	196	198	188	192	195	195	147	153	170	160	164	194	211	210	179	192	215	219	199	170	189	110	127	191	186	3.3	
6	185	182	103	149	165	145	122	184	206	208	216	218	223	229	225	223	226	224	218	216	284	317	320	320	215	5.3	
7	274	270	278	265	71	156	291	295	163	233	255	269	333	330	349	357	350	158	19	327	299	214	281	304	294	2.0	
8	303	312	302	240	276	289	260	171	170	227	263	255	256	245	231	231	228	247	218	210	210	235	277	228	242	3.8	
9	145	147	175	186	196	194	196	201	204	204	199	211	221	230	219	221	228	230	216	207	206	198	188	192	206	7.5	
10	190	197	194	187	168	176	141	166	203	218	222	226	212	217	226	227	222	211	189	213	191	181	179	178	205	6.3	
11	194	215	219	305	292	126	223	226	221	217	217	212	222	232	229	228	233	231	242	230	227	226	228	209	225	7.2	
12	210	223	219	222	221	217	211	205	212	208	211	215	232	228	235	219	222	233	217	202	202	177	127	219	217	6.9	
13	220	307	352	81	159	220	259	234	256	329	319	318	358	347	337	342	328	21	358	35	83	24	345	298	326	1.2	
14	301	263	236	104	146	348	283	**	331	346	346	246	260	216	220	296	20	63	37	193	223	201	196	192	233	1.1	
15	169	166	199	206	182	188	192	195	208	221	210	234	222	223	224	226	240	299	266	195	183	225	214	214	216	5.4	
16	221	219	215	204	194	159	198	207	202	219	227	253	245	249	260	287	330	64	131	207	215	207	204	195	223	4.5	
17	192	192	196	190	197	188	173	311	238	217	227	251	237	232	234	238	238	236	244	231	231	214	208	304	229	3.5	
18	38	112	136	132	135	**	299	81	17	42	89	31	351	6	317	141	4	260	204	180	217	220	199	198	196	0.8	
19	155	170	132	136	117	156	174	154	174	192	188	179	196	229	208	209	217	228	237	232	245	176	180	246	198	5.2	
20	92	121	343	270	268	169	179	143	196	192	209	210	208	218	235	232	228	239	236	238	226	226	224	237	219	5.7	
21	262	241	210	240	225	222	202	216	245	261	258	258	251	259	297	303	250	270	276	318	37	49	50	109	262	4.1	
22	311	353	356	353	328	289	305	330	21	344	341	333	339	14	355	358	337	329	42	63	141	139	159	130	352	1.7	
23	109	113	95	35	279	278	225	68	98	44	334	337	330	17	18	11	0	13	25	47	130	161	197	219	20	1.0	
24	189	204	208	124	212	200	192	186	229	286	302	349	344	318	2	311	310	275	269	231	227	219	217	208	253	1.8	
25	212	211	209	250	102	298	44	113	214	228	217	225	220	228	233	243	241	231	223	223	211	198	202	202	221	5.0	
26	202	198	204	198	192	178	170	192	211	218	220	220	224	214	219	210	221	220	219	210	219	215	206	195	210	7.6	
27	208	234	305	266	244	20	121	69	68	72	8	232	249	232	214	218	250	306	324	319	349	5	23	7	274	2.4	
28	359	10	340	320	306	304	280	300	330	346	350	328	332	323	326	338	343	352	333	297	284	274	255	230	325	2.6	
29	182	112	113	293	196	320	234	300	341	24	249	5	4	6	329	346	351	313	339	24	13	250	221	352	341	1.4	
30	63	274	283	258	303	274	269	281	337	11	15	341	335	342	11	355	21	29	16	52	116	132	139	90	4	1.4	
VD	204	206	209	205	201	202	201	205	214	222	230	239	238	240	243	244	246	251	243	222	217	208	211	212	225		
VV	2.6	2.7	2.0	1.7	2.6	2.6	2.8	2.6	3.3	3.7	3.8	4.3	4.5	4.9	4.8	4.2	3.8	3.5	2.9	3.1	3.5	3.1	2.5	2.4		3.1	

TOTAL NUMBER OF OBSERVATIONS = 718

NOTE: \*\*\*\* = MISSING DATA



CB-FRACT  
TRAILER AB20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

[illegible]

SIGMA HORIZ. WIND DIR. @ 10M  
DEGREES

CB-IRACT  
TRAILER AAZJ  
APR 1981  
OCCIDENTIAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	14	21	9	24	7	7	9	7	15	11	12	12	12	13	10	11	10	9	5	4	4	5	7	7	10	24
2	3	6	8	5	4	4	5	9	11	11	14	12	12	12	13	13	15	18	10	10	10	12	12	12	10	18
3	11	9	12	39	18	10	10	9	8	10	8	8	11	9	11	10	9	7	6	7	13	11	3	8	11	39
4	5	6	7	7	8	7	11	8	10	12	10	11	10	13	13	11	11	28	12	20	9	6	22	16	11	28
5	14	9	(CM)	17	18	28	4	7	11	11	15	16	16	16	14	16	13	10	8	8	11	15	12	17	13	28
6	6	34	11	14	11	28	15	14	12	10	11	11	12	11	12	11	10	10	7	5	12	19	15	10	13	34
7	5	4	26	45	(CM)	11	24	12	25	17	22	15	12	10	18	11	15	19	16	11	7	10	12	8	15	45
8	5	10	7	15	10	5	5	16	19	16	13	19	21	19	14	14	14	13	8	6	6	9	7	10	12	21
9	3	8	11	11	6	5	7	8	10	11	10	13	14	14	13	12	13	11	7	5	5	5	3	2	9	14
10	2	5	4	4	16	11	7	36	12	15	13	15	12	12	13	15	12	11	6	4	4	8	3	4	10	36
11	4	4	10	14	18	10	13	9	11	13	15	12	13	15	12	11	10	10	7	7	5	5	8	4	10	18
12	4	6	7	6	6	7	7	8	11	13	16	16	12	14	12	11	11	9	7	5	11	9	12	53	11	53
13	30	24	18	24	15	13	23	18	34	30	30	20	34	27	37	29	23	24	7	13	7	18	8	4	21	37
14	9	14	(CM)	12	9	8	14	43	21	31	17	22	24	33	20	18	13	19	12	9	5	7	7	10	16	43
15	14	7	7	8	6	7	8	11	10	9	13	13	14	15	13	12	13	12	13	14	17	15	6	5	11	17
16	7	7	5	15	6	6	11	17	10	16	15	14	15	20	11	13	22	19	12	7	7	7	6	19	12	22
17	27	16	22	23	12	10	13	25	31	13	15	14	15	18	17	17	15	12	6	4	5	12	10	22	16	31
18	12	14	11	5	7	16	7	40	24	25	25	35	13	16	11	21	26	9	12	10	12	9	13	17	16	40
19	13	11	16	17	16	11	6	8	12	12	10	13	14	12	13	15	14	17	12	7	8	8	6	18	12	18
20	21	13	10	18	9	8	15	34	18	10	12	14	14	14	12	15	12	10	10	18	9	14	13	17	13	34
21	8	5	25	11	12	11	16	16	13	14	14	14	13	12	9	10	13	10	6	10	5	21	11	8	15	30
22	10	11	16	19	6	4	7	(CM)	26	20	20	30	20	24	20	28	17	17	7	9	7	8	9	9	18	46
23	11	8	8	7	10	11	9	22	34	32	26	25	23	36	46	23	20	29	7	9	7	29	29	14	19	42
24	14	15	10	9	8	11	8	26	22	28	30	42	22	26	21	28	23	12	9	6	4	4	5	5	14	39
25	39	35	23	26	13	9	14	12	17	14	14	14	14	15	13	15	11	11	8	5	4	4	3	5	9	14
26	13	8	4	6	4	4	6	13	12	13	14	13	14	14	12	14	13	10	8	5	9	13	28	22	17	42
27	4	10	11	3	25	9	19	24	42	31	32	33	13	14	14	13	13	10	9	8	9	13	7	18	10	34
28	16	9	9	9	6	5	7	16	34	26	27	25	32	24	31	18	16	11	8	6	10	7	3	18	16	34
29	16	(CM)	7	12	12	10	19	33	44	35	38	46	36	37	17	23	15	11	8	9	3	5	(CM)	(CM)	21	46
30	21	12	9	9	7	6	18	18	21	22	30	34	26	26	25	15	15	12	7	7	7	7	17	13	16	34
AV	12	12	11	14	11	10	11	18	19	18	18	19	17	18	17	16	15	14	9	8	8	10	10	13	14	53
PK	39	35	26	45	25	28	24	43	44	35	38	46	36	37	46	29	26	29	16	20	17	29	29	53		

SIGMA HORIZ. WIND DIR. @ 30M  
DEGREES

CB-TRACI  
TRAILER AA23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	16	23	13	22	6	6	8	7	14	12	12	11	12	12	10	10	10	8	4	3	3	3	12	10	10	23
2	2	5	5	3	4	3	5	9	10	10	13	11	11	12	13	12	14	16	9	9	9	11	13	10	9	16
3	11	9	10	33	18	9	8	8	8	9	6	7	10	9	9	9	9	4	1	0	0	0	0	0	8	33
4	0	0	0	0	0	0	0	2	7	11	9	9	9	11	13	10	10	23	15	12	9	6	22	23	8	23
5	16	13 (CM)	31	31	21	23	5	7	10	9	13	16	15	15	13	17	11	9	8	11	12	15	16	9	14	31
6	5	34	22	19	11	25	16	15	10	9	10	10	11	9	12	10	9	9	6	3	11	17	20	12	13	34
7	5	6	43	54	29	12	26	11	25	17	21	14	11	8	15	9	13	19	18	9	8	11	11	7	17	54
8	5	8	7	15	17	5	4	15	17	17	12	15	20	16	13	12	12	12	7	5	5	9	7	5	11	20
9	4	4	6	15	6	4	7	8	9	10	10	12	13	13	12	11	11	10	6	3	3	3	2	3	8	15
10	3	2	2	3	10	12	9	37	12	13	12	13	11	12	11	14	11	10	6	3	4	3	3	2	9	37
11	3	3	7	20	16	12	15	8	10	12	15	11	12	14	12	9	9	9	6	4	2	3	6	3	9	20
12	3	3	5	3	4	5	6	7	10	12	14	16	10	13	10	10	9	7	6	4	9	12	15	39	10	39
13	21	23	16	13	11	20	17	17	31	28	31	20	31	21	32	25	24	16	5	7	7	12	10	6	19	32
14	7	21 (CM)	8	8	15	44	15	31	21	27	16	20	22	28	19	16	10	17	9	9	4	6	6	10	17	44
15	15	7	8	7	6	6	8	11	10	8	10	13	13	13	12	11	11	10	12	13	20	12	4	4	10	20
16	4	5	3	9	12	10	18	16	9	15	13	13	14	15	10	11	19	14	9	7	5	6	7	29	11	29
17	26	36	52	36	33	30	28	39	28	12	13	13	14	16	14	17	13	11	5	3	2	31	24	19	21	52
18	(CM)	21	5	4	10	18	29	23	20	21	21	29	10	14	9	22	14	8	12	11	10	9	14	18	15	29
19	13	12	16	16	12	12	6	7	11	10	10	12	14	11	13	14	12	17	10	6	6	8	5	17	11	17
20	11	7	24	13	7	7	12	35	20	11	11	13	14	12	11	13	11	9	8	6	4	2	3	13	12	35
21	8	6	24	9	8	8	9	13	11	13	11	12	12	10	9	8	12	9	8	18	8	12	12	30	12	30
22	19	8	13	9	11	9	9	31	20	17	20	23	18	25	18	20	18	16	5	9	5	11	15	13	15	31
23	24	7	5	18	17	14	21	15	31	25	21	26	20	31	35	21	19	23	6	6	6	21	17	20	19	35
24	13	13	7	9	10	13	16	26	21	29	31	33	21	21	23	24	24	12	8	4	4	17	40	46	19	46
25	51	60	50	57	26	24	11	9	15	12	13	12	13	14	12	14	10	10	7	3	2	3	4	5	18	60
26	15	7	3	4	3	2	5	13	11	12	14	12	12	13	10	13	11	11	8	4	3	2	2	2	8	15
27	2	11	10	4	18	8	11	19	30	28	28	31	12	12	12	11	12	9	8	7	8	12	20	15	14	31
28	11	35	11	6	5	4	6	14	31	22	24	22	28	22	29	17	13	8	8	5	8	9	4	18	15	35
29	22	12	8	8	24	11	14	34	30	26	38	44	31	36	14	20	14	10	7	6	23	11 (CM)	24	20	44	
30	22	14	11	12	13	10	13	19	21	19	26	31	24	26	20	13	14	11	6	5	6	5	17 (CM)	16	16	31
AV	12	14	14	15	13	12	12	17	17	16	17	17	16	16	15	14	13	12	8	7	7	9	11	14	13	60
PK	51	60	52	57	33	44	29	39	31	29	38	44	31	36	35	25	24	23	18	18	23	31	40	46		

SIGMA HORIZ. WIND DIR. @ 60M  
DEGREES

CB-TRACT  
TRAILER AA23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	14	18	24	23	4	5	5	6	13	11	11	10	11	12	8	9	9	6	3	3	2	6	14	7	10	24
2	2	4	4	2	3	2	3	8	9	9	12	10	9	9	10	12	13	15	8	8	8	10	12	11	8	15
3	10	8	10	26	17	7	7	7	7	7	5	6	9	5	3	3	3	0	0	0	0	0	0	0	0	26
4	0	0	0	0	0	0	0	1	0	0	6	9	10	10	12	10	11	25	15	14	10	7	13	17	7	25
5	11	10	17	35	14	33	8	6	8	7	12	15	12	14	12	14	9	9	7	11	9	21	27	6	14	35
6	5	22	46	22	10	26	23	16	9	20	20	14	9	8	12	9	13	26	19	7	12	14	10	6	13	46
7	5	7	4	13	17	5	3	15	18	14	11	14	17	8	14	9	11	11	5	3	1	8	7	6	10	58
8	5	5	4	6	12	4	7	7	29	8	9	11	11	11	12	11	12	11	5	2	1	3	2	3	7	18
9	3	2	3	5	15	15	13	29	11	12	12	11	11	10	10	9	10	9	5	3	4	5	3	2	9	29
10	3	2	4	21	15	15	19	7	9	11	13	10	10	13	10	9	8	9	5	4	2	2	4	3	9	21
11	2	2	2	2	2	2	2	5	9	10	13	14	10	11	10	9	9	5	5	3	8	13	24	23	8	24
12	2	2	16	12	14	17	14	14	28	30	27	15	28	21	31	22	25	14	5	6	10	11	10	6	18	32
13	12	32	7	5	9	10	7	(CM)	23	29	14	17	17	25	19	16	9	18	9	11	2	5	5	8	12	29
14	3	7	7	5	6	5	6	10	9	7	10	11	11	12	11	10	11	10	10	9	23	5	2	3	9	23
15	13	8	7	5	15	15	11	12	8	12	11	12	12	12	10	11	17	14	8	5	3	4	5	21	10	21
16	2	3	2	6	15	40	40	50	27	9	12	12	13	15	12	15	11	10	4	2	1	18	28	11	21	50
17	12	49	44	38	23	40	13	21	21	24	16	25	10	13	8	23	14	7	10	11	8	8	13	16	13	25
18	15	6	5	3	5	(CM)	13	6	9	9	8	10	12	10	12	12	12	18	9	5	4	10	5	16	11	19
19	11	11	19	16	14	13	4	29	16	9	10	11	12	10	10	12	9	8	6	5	3	2	2	9	9	29
20	9	6	13	6	5	8	5	11	10	10	11	12	11	9	7	7	11	8	7	16	8	11	12	30	10	30
21	7	5	16	11	5	4	6	32	23	15	18	21	16	25	19	18	19	16	5	6	11	7	18	8	14	32
22	19	7	9	8	7	7	8	12	30	26	20	21	18	34	29	20	17	17	7	5	6	12	20	21	17	34
23	20	5	7	8	20	9	12	23	18	24	33	29	20	20	20	26	24	11	8	2	2	5	11	21	16	33
24	11	8	17	14	7	8	14	31	13	10	11	11	12	13	10	12	9	10	6	3	2	2	3	4	14	41
25	21	24	32	29	30	41	14	9	13	10	13	10	11	12	9	12	10	9	6	3	2	1	1	2	7	13
26	8	5	2	1	2	2	4	12	10	10	13	31	11	10	11	11	12	8	7	6	8	13	18	14	14	38
27	2	9	8	5	38	8	6	15	27	24	30	31	11	10	25	14	12	7	7	4	6	7	4	11	14	30
28	10	16	11	6	5	6	4	15	30	18	27	21	25	22	25	14	12	10	7	6	6	7	24	11	13	38
29	10	16	13	16	7	12	16	28	29	28	39	40	39	35	13	17	13	10	7	6	16	19	24	22	20	40
30	27	11	12	6	12	9	5	13	28	20	23	27	23	20	17	11	14	12	6	5	7	5	12	14	14	28
AV	9	10	13	14	12	12	10	16	16	14	16	16	14	15	13	13	12	11	7	6	6	8	11	11	12	58
PK	27	49	46	58	38	41	40	50	30	30	39	40	39	35	31	26	25	26	19	16	23	21	28	30		



TEMPERATURE  
DEGREE C

CB-TRACT  
TRAILER AB20  
APR 1981  
OCCIDENTIAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
2	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
3	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
4	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
5	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
6	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
7	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
8	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
9	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
10	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
11	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
12	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
13	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	( )
14	-2	-3	-3	-3	-3	-4	-3	1	2	13	17	17	18	19	18	18	17	17	15	9	5	2	0	-2	( )
15	6	6	6	5	5	6	7	7	9	10	12	12	13	14	16	16	18	17	15	11	9	7	7	6	8
16	3	2	1	1	1	0	1	5	10	14	16	17	17	12	15	17	15	15	14	6	6	5	4	3	8
17	5	5	5	5	5	5	6	8	13	19	19	19	19	21	21	21	20	20	19	13	10	8	7	6	9
18	5	4	4	3	2	0	0	6	12	16	21	21	20	20	20	19	19	19	17	15	14	11	10	10	12
19	9	9	9	9	8	7	8	9	11	14	15	15	14	14	14	14	15	14	12	10	8	6	4	1	11
20	0	-1	-2	-1	-1	-1	1	4	11	13	13	14	14	14	12	11	11	11	9	6	5	3	3	1	7
21	1	-1	-1	-2	-1	-1	-1	6	12	14	14	15	14	12	12	14	14	13	11	6	4	1	1	0	11
22	3	1	0	0	-1	-2	-1	1	6	6	8	10	12	12	12	19	19	19	15	11	8	4	4	4	7
23	-1	-2	-3	-3	-3	-4	-2	2	9	12	14	15	16	18	19	19	21	21	20	19	14	6	4	2	8
24	2	1	1	1	0	1	3	9	13	14	16	17	21	22	22	23	22	21	22	19	14	10	9	8	11
25	6	5	4	4	4	4	5	8	12	19	21	22	23	23	23	23	23	23	22	20	14	10	8	7	14
26	6	6	6	6	5	4	4	6	12	18	20	21	21	21	22	23	23	23	22	20	14	10	9	7	14
27	6	6	5	4	2	1	1	5	10	17	19	20	21	21	21	21	21	20	19	16	13	11	9	8	12
28	6	4	1	-1	-1	-2	-2	0	6	10	12	15	15	17	19	19	20	20	19	16	12	8	6	4	9
29	4	3	3	1	0	-1	-1	2	7	14	17	21	21	23	24	23	23	23	22	19	14	11	8	7	12
30	6	5	4	3	3	2	1	5	10	15	20	21	21	22	22	23	23	22	21	17	13	10	8	6	13

MONTHLY MINIMUM = -4

AV	(	)	(	)	(	)	(	)	(	)	(	)	(	)	(	)	(	)	(	)	(	)	(	)	(	)
PK	9	9	9	9	8	7	8	9	13	19	21	22	22	23	24	23	23	23	22	21	14	11	10	10	10	24
MIN	-2	-3	-3	-3	-3	-4	-3	0	2	6	8	10	12	12	12	11	11	10	7	6	4	1	0	-2	-2	



TEMPERATURE @ 10M  
DEGREE C

CD-FRAC1  
TRAILER AA23  
APR 1991  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	-1	-1	-1	0	2	1	2	4	5	0	7	8	9	9	10	10	9	9	8	7	7	6	6	5	5	10
2	3	2	2	1	1	0	6	8	9	11	11	12	12	13	13	12	11	9	9	9	8	8	6	4	9	13
3	-5	-4	-5	-6	-6	-6	0	-1	-1	-2	-3	-3	-2	-2	-2	-2	-1	-2	-2	-3	-4	-4	-4	-4	-1	3
4	-8	-8	-7	-7	-7	-8	-9	-6	-2	0	1	2	3	4	5	6	6	6	5	3	3	2	2	2	0	6
5	2	2	2	3	2	3	3	5	7	8	9	9	11	11	11	12	12	12	9	8	7	7	5	4	7	12
6	3	2	1	1	1	0	-1	0	2	8	8	7	5	3	4	4	4	4	3	2	1	1	1	1	1	8
7	0	0	-1	-2	-2	-3	-3	-2	1	3	4	5	6	6	7	7	7	7	7	5	4	3	3	3	3	7
8	3	3	3	4	5	6	6	8	9	10	11	12	13	13	14	14	15	14	13	11	11	11	11	9	10	15
9	9	8	8	8	8	7	6	10	12	13	14	15	16	16	17	17	17	16	14	13	12	11	10	9	12	17
10	9	9	8	7	7	7	8	11	12	12	13	14	14	15	16	16	15	14	13	11	9	8	9	9	11	16
11	9	8	8	6	6	6	6	9	11	11	12	13	13	14	14	13	14	14	12	11	9	9	9	9	10	14
12	9	8	8	8	8	8	8	9	11	12	13	13	13	13	14	14	14	14	13	12	11	8	6	6	11	14
13	9	8	8	8	8	8	8	9	11	12	13	13	13	13	14	14	14	14	13	12	11	8	6	6	11	14
14	5	4	4	3	3	2	3	6	8	12	13	15	16	16	16	16	14	12	12	10	9	10	9	9	10	16
15	8	8	8	8	7	6	7	7	8	8	9	11	12	12	13	13	13	13	9	6	5	5	4	5	8	13
16	4	5	5	4	5	4	5	8	10	12	13	14	14	13	15	15	13	13	13	12	12	12	11	9	10	15
17	9	8	8	8	8	8	9	12	14	16	17	17	17	18	18	18	18	18	17	14	13	12	11	11	13	18
18	11	9	8	10	8	7	8	11	14	17	18	18	18	18	18	17	17	17	14	13	11	9	9	8	9	14
19	8	8	8	7	7	7	8	8	10	12	12	13	14	12	11	12	12	12	11	8	7	6	6	4	9	14
20	3	4	2	2	2	3	3	7	10	11	12	13	13	12	12	13	13	12	10	9	7	6	6	5	8	13
21	6	6	4	3	3	4	6	8	10	11	12	13	13	12	12	13	13	12	11	9	7	6	6	3	7	13
22	2	2	2	2	1	1	1	2	4	5	6	7	8	9	10	10	10	10	10	9	8	7	4	4	6	11
23	3	4	4	4	2	1	2	5	8	9	11	12	13	14	14	16	16	16	14	13	12	11	13	8	9	16
24	9	8	8	8	9	9	9	12	16	17	18	18	19	20	19	19	19	19	18	15	14	14	13	13	14	20
25	12	11	11	11	11	10	11	14	17	18	19	19	21	21	21	21	20	19	18	16	15	14	14	14	16	21
26	13	13	13	12	13	12	13	16	16	17	18	19	19	19	20	21	21	20	18	17	15	14	14	13	16	21
27	13	11	11	11	10	9	9	13	14	16	17	18	18	18	18	18	19	17	16	13	11	9	8	8	13	19
28	6	6	4	3	3	2	3	5	7	9	11	13	14	15	16	17	17	17	16	14	12	12	11	11	10	17
29	9	8	8	7	7	5	6	9	12	13	16	17	18	20	21	21	21	21	19	17	16	15	13	12	14	21
30	11	10	9	10	9	9	9	12	14	16	17	18	19	19	19	20	21	20	19	18	16	14	13	11	15	21
AV	6	5	5	5	5	4	5	7	9	10	11	12	12	13	13	13	13	13	11	10	9	8	7	7	9	
PK	13	13	13	12	13	12	13	16	17	18	19	19	21	21	21	21	21	21	19	18	16	15	14	14		21
MIN	-8	-8	-7	-7	-7	-8	-9	-6	-5	-4	-3	-3	-5	-3	-2	-2	-3	-3	-3	-3	-4	-6	-7	-8		

MONTHLY MINIMUM = -9

TEMPERATURE @ 30M  
DEGREE C

CB-TRACT  
TRAILER AA23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK	
1	-1	-1	0	1	2	2	2	4	4	6	7	8	8	9	9	9	9	9	8	8	8	7	7	7	6	9	
2	7	7	7	7	7	7	7	8	9	10	11	11	12	12	12	12	11	9	9	9	9	8	6	3	9	12	
3	3	2	2	1	1	1	0	-1	-1	-2	-3	-3	-3	-2	-2	-2	-2	-2	-3	-3	-4	-4	-4	-4	-1	3	
4	-4	-4	-5	-6	-6	-6	-6	-6	-6	-4	-3	-3	-5	-4	-2	-2	-3	-3	-3	-3	-4	-4	-6	-6	-4	-2	
5	-7	-7	-7	-7	-6	-7	-8	-6	-2	-1	1	2	3	4	4	6	6	6	5	4	3	2	3	3	0	6	
6	3	2	3	3	3	3	3	5	7	8	8	9	10	11	11	11	12	11	10	9	8	7	6	4	7	12	
7	3	3	2	1	1	1	0	1	2	7	7	7	5	3	4	4	4	4	3	2	1	1	2	1	1	3	7
8	0	0	-1	-1	-2	-3	-3	-2	1	2	3	4	5	6	6	6	7	7	7	6	4	4	4	4	3	7	
9	4	4	4	4	6	6	6	4	8	9	10	11	12	13	14	14	14	14	13	12	12	12	12	11	10	14	
10	11	10	9	10	8	8	7	10	12	12	13	14	15	16	16	16	16	16	14	13	13	13	12	11	12	16	
11	10	10	9	8	8	7	7	11	11	12	13	13	14	14	14	14	14	14	13	12	11	10	10	11	11	14	
12	10	9	8	8	7	7	7	9	11	12	12	13	13	13	13	13	12	12	11	11	10	9	9	9	10	13	
13	9	9	9	8	8	9	8	9	11	11	12	12	12	13	13	14	14	14	13	12	11	9	8	7	11	14	
14	6	5	4	4	4	3	3	6	8	11	13	14	15	16	16	16	14	12	12	11	11	10	9	9	10	16	
15	8	8	6	6	6	6	7	7	9	11	13	14	14	13	13	12	13	13	13	13	12	12	12	11	8	13	
16	6	6	6	6	6	6	7	7	7	8	9	10	11	12	13	14	13	13	13	13	12	12	12	11	6	13	
17	10	11	11	12	11	9	11	12	14	16	17	17	17	18	18	18	17	17	17	14	13	14	13	11	10	14	
18	12	11	8	7	7	7	8	11	13	17	18	18	18	18	18	18	17	17	14	13	11	9	9	8	13	18	
19	8	8	8	7	7	7	8	8	9	11	11	12	12	12	12	12	12	12	11	9	8	8	7	6	9	13	
20	4	5	3	2	3	3	4	7	9	12	12	13	13	12	12	12	12	12	11	9	4	3	3	3	7	13	
21	6	6	5	4	4	6	7	8	9	11	11	12	13	12	12	12	12	12	11	9	6	6	6	6	6	10	
22	3	3	2	2	2	1	1	2	4	4	6	7	8	8	9	9	9	9	8	6	4	3	6	6	6	10	
23	5	5	5	5	3	2	3	5	7	9	11	12	12	13	14	15	16	16	14	13	13	12	11	10	10	16	
24	11	10	9	10	10	10	11	12	15	17	18	19	19	19	19	19	19	19	18	17	15	15	14	13	15	19	
25	13	13	12	13	13	12	13	14	17	18	18	19	20	20	20	21	20	20	19	18	17	16	15	15	16	21	
26	14	14	14	14	14	14	14	15	16	17	18	18	18	19	19	20	20	19	18	17	17	16	16	16	17	20	
27	15	13	12	12	11	11	11	13	14	15	16	17	18	18	18	18	18	17	16	15	14	13	12	12	14	19	
28	7	6	6	4	3	3	3	4	7	8	11	12	13	14	16	16	17	16	16	14	13	12	12	12	10	17	
29	11	9	9	8	8	7	7	9	11	13	15	17	18	19	20	20	20	20	19	18	17	16	14	13	14	20	
30	13	12	11	11	10	10	9	11	13	16	17	18	18	18	19	19	20	20	19	18	17	17	14	13	15	20	

AV	7	6	6	6	5	5	5	7	8	10	11	12	12	13	13	13	13	13	11	10	9	9	8	8	9	9	21
PK	15	14	14	14	14	14	14	15	17	18	18	19	20	20	20	21	20	20	20	19	18	17	16	16	16	16	21
MN	-7	-7	-7	-7	-6	-7	-8	-6	-6	-4	-3	-3	-5	-4	-2	-2	-3	-3	-3	-3	-4	-4	-6	-6	-6	-6	21

MONTHLY MINIMUM = -8

TEMPERATURE IN SUM  
DEGREE C

CH-TRACT  
TRAILER AA23  
APR 1981  
OCCIDENTIAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	0	0	0	1	2	2	3	4	4	6	7	8	9	9	9	9	9	9	8	8	8	8	7	7	6	9
2	8	7	7	8	8	7	7	8	9	10	11	11	12	12	12	12	10	9	9	9	9	8	5	3	9	12
3	3	2	2	1	1	1	0	-1	-1	-2	-3	-3	-2	-2	-2	-2	-2	-2	-3	-3	-4	-4	-4	-4	-2	3
4	-4	-4	-5	-6	-6	-6	-6	-6	-6	-4	-3	-1	-5	-3	-1	-1	-3	-3	-3	-3	-4	-4	-5	-6	-4	-1
5	-6	-6	-6	-6	-6	-6	-7	-4	-2	0	1	3	3	4	5	6	6	6	5	4	3	2	3	3	0	6
6	3	3	3	3	3	3	3	5	7	8	8	9	10	10	11	11	11	11	10	10	8	8	6	4	7	11
7	3	3	2	2	1	1	1	1	2	7	7	7	4	3	3	4	4	4	3	2	1	1	1	1	1	7
8	0	0	-1	-2	-2	-3	-3	-2	1	2	3	4	5	6	6	6	7	7	6	6	6	5	4	4	3	7
9	5	4	5	5	6	6	7	8	9	9	11	11	12	13	13	14	14	14	13	13	12	12	12	11	10	14
10	11	11	11	11	9	8	8	10	12	12	13	14	14	15	16	16	16	16	14	13	13	13	12	11	10	16
11	11	11	11	8	8	8	9	11	11	12	12	13	13	14	14	14	14	13	13	13	12	11	11	11	12	14
12	11	9	9	9	8	8	8	9	11	11	12	12	13	13	13	12	12	12	11	11	10	10	9	9	10	13
13	9	9	9	9	9	8	8	9	10	11	12	12	12	13	13	14	14	14	13	12	11	10	8	7	11	14
14	7	6	5	6	5	4	4	6	8	11	13	14	15	16	16	16	14	13	12	11	11	10	9	9	10	16
15	8	8	8	7	6	6	6	7	7	7	8	9	11	11	12	12	12	9	6	6	6	6	7	7	8	12
16	6	6	7	6	6	6	7	8	9	11	13	13	14	14	14	14	13	13	13	13	13	13	12	11	11	14
17	11	9	9	10	9	9	11	12	14	16	17	16	17	17	18	18	18	17	17	16	16	14	14	12	14	18
18	12	12	12	12	12	9	8	11	13	16	17	18	18	18	17	17	17	17	14	13	11	9	8	8	8	13
19	8	8	8	7	7	7	8	8	9	10	11	12	12	12	12	12	12	11	10	9	8	7	7	6	9	13
20	5	5	4	3	3	3	6	7	9	10	11	11	12	12	12	12	12	11	11	9	8	8	8	7	8	12
21	6	7	5	4	6	6	7	8	9	10	11	12	12	11	10	9	9	10	9	9	9	8	3	3	7	12
22	3	3	2	2	2	2	1	2	4	4	6	7	8	8	9	9	9	9	7	6	4	3	3	3	7	10
23	6	5	6	5	3	3	3	4	7	9	10	12	12	13	14	15	15	15	14	13	13	12	12	11	10	15
24	11	10	10	11	11	11	11	13	15	16	16	18	19	19	19	19	19	19	18	17	17	16	16	15	13	19
25	13	13	13	13	13	13	13	14	17	18	18	18	19	19	19	20	19	19	19	19	17	17	16	15	16	20
26	14	15	15	15	15	14	14	15	16	16	17	18	18	19	19	19	19	19	18	17	17	17	17	16	17	19
27	16	13	12	12	11	11	11	13	13	15	16	17	17	17	17	18	18	17	15	14	13	9	8	7	14	18
28	7	6	6	4	3	3	3	4	6	8	11	12	13	14	16	16	16	16	16	14	13	12	12	12	10	16
29	12	10	9	8	8	7	7	9	11	13	15	17	18	19	20	19	20	20	19	18	17	16	15	14	14	20
30	14	13	11	11	10	10	10	11	13	16	17	17	18	18	19	19	20	19	19	18	17	17	15	13	15	20

MONTHLY MINIMUM = -7

AV	7	7	6	6	6	5	6	7	8	10	11	11	12	12	12	13	13	13	12	11	10	9	8	8	8	9	20
PK	16	15	15	15	15	14	14	15	17	18	18	18	19	19	20	20	20	20	20	19	18	17	17	17	16	9	
MIN	-6	-6	-6	-6	-6	-6	-7	-6	-6	-4	-3	-3	-5	-3	-2	-2	-2	-3	-3	-3	-3	-4	-5	-5	-6		

C-B TRACT  
MRI AD42  
April, 1981

TEMPERATURE @10M

DATA NOT AVAILABLE AT REPORT TIME

C-B TRACT  
MRI AD56  
April, 1981

TEMPERATURE @10M

DATA NOT AVAILABLE AT REPORT TIME



DELTA TEMPERATURE 60-100M  
DEGREE C\*100

CR-TRACT  
TRAILER AA23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	56	89	33	17	56	39	50	-33	-50	-50	-39	-44	-56	-61	-72	-72	-67	-44	44	72	83	117	83	194	14	194
2	133	67	33	106	78	61	44	-44	-61	-72	-83	-100	-94	-106	-94	-89	-61	-56	-6	-22	28	-39	-56	-61	-21	133
3	-44	-61	-56	-56	-56	-56	-33	-61	-156	-383	-17	-72	-61	-56	-61	-83	-72	-67	-56	-50	-56	-61	-39	6	-71	0
4	17	-22	-11	-22	-33	-61	-44	-67	-72	-72	-44	83	-22	-50	-39	56	-39	-50	-44	-44	-22	28	206	167	-9	206
5	206	189	89	78	83	133	183	144	-33	-33	-28	-11	-22	-22	-28	-44	-61	-61	-11	-11	-11	28	50	67	38	206
6	67	33	17	-6	56	-28	-33	-39	-44	-33	-50	-72	-89	-100	-94	-89	-83	-72	11	178	122	11	6	6	-14	178
7	22	56	44	33	56	78	128	11	-39	-56	-72	-78	-100	-94	-94	-78	-83	-61	-22	-39	-33	-22	-17	-39	-21	128
8	-39	-56	-50	-44	-33	-50	-56	-72	-83	-94	-106	-106	-106	-100	-111	-94	-94	-72	-39	33	117	128	72	94	-40	128
9	67	94	100	33	11	39	-6	-56	-83	-100	-117	-117	-122	-122	-111	-106	-94	-72	-6	122	139	133	122	139	-5	139
10	133	211	217	189	100	50	133	0	-78	-94	-106	-122	-122	-122	-122	-111	-100	-78	-17	44	72	139	117	139	20	217
11	128	144	194	78	61	56	72	-44	-83	-94	-111	-128	-128	-144	-133	-128	-111	-78	-11	128	239	250	111	89	15	250
12	128	172	167	206	211	172	122	-61	-89	-100	-111	-117	-122	-106	-100	-94	-83	-67	-11	22	11	6	11	6	7	211
13	-11	22	6	33	89	0	-17	-72	-89	-72	-72	-89	-100	-78	-83	-78	-67	-50	-11	39	22	161	183	94	-11	183
14	156	111	50	106	172	139	83	-44	-72	-72	-72	-89	-100	-78	-72	-89	-50	0	-17	67	139	0	-39	-44	8	172
15	-33	17	-33	-39	-44	-44	-61	-72	-78	-94	-94	-100	-117	-117	-139	-100	-106	-78	-61	-28	-22	72	144	94	-47	144
16	139	89	122	111	61	144	128	-11	-72	-83	-106	-100	-89	-61	-117	-106	-61	-67	-17	61	122	72	56	83	13	144
17	117	89	83	100	106	111	83	0	-78	-100	-111	-106	-94	-106	-106	-89	-100	-78	-17	133	233	144	217	133	24	233
18	111	163	261	167	294	100	39	-44	-67	-67	-83	-72	-78	-72	-89	-67	-61	-67	-44	-28	-50	-56	-61	-61	4	294
19	-56	-50	-44	-44	-50	-39	-39	-67	-78	-117	-133	-150	-161	-144	-128	-117	-106	-89	-56	6	44	6	108	161	-56	161
20	133	56	161	67	67	39	133	-22	-89	-133	-117	-122	-133	-122	-117	-117	-106	-89	-56	11	111	172	156	133	1	172
21	44	83	17	83	150	128	17	-56	-94	-117	-128	-133	-122	-89	-50	-67	-94	-83	-56	-39	-39	-61	-67	-56	-34	150
22	17	-11	-17	11	72	44	11	-61	-72	-106	-94	-100	-117	-94	-111	-100	-89	-83	-61	0	28	122	167	150	-20	167
23	178	28	61	94	150	94	78	-50	-61	-72	-106	-111	-122	-94	-89	-100	-89	-67	-22	6	39	78	217	172	9	217
24	189	172	144	122	133	117	117	6	-83	-78	-100	-83	-94	-106	-94	-83	-78	-56	-50	150	239	161	156	67	36	239
25	56	122	133	150	183	233	156	-28	-72	-94	-106	-117	-117	-122	-133	-122	-89	-67	-28	128	194	206	128	78	28	233
26	89	139	178	217	128	178	28	-72	-89	-100	-117	-128	-133	-133	-128	-117	-100	-72	-11	44	172	244	189	239	27	244
27	272	194	117	133	89	83	117	-39	-56	-67	-89	-94	-128	-128	-100	-94	-106	-72	-61	-39	-39	-33	-33	-28	-8	272
28	17	50	78	56	44	44	-44	-89	-83	-83	-94	-117	-117	-117	-106	-100	-89	-72	-56	6	28	39	61	128	-26	128
29	228	150	133	117	133	194	50	-39	-78	-72	-89	-83	-83	-72	-106	-106	-89	-83	-33	22	50	83	167	206	25	228
30	267	256	144	83	61	67	50	-72	-78	-78	-83	-100	-117	-100	-83	-100	-83	-67	-11	11	78	144	161	172	22	267

MONTHLY MINIMUM = -383

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
AV	93	87	79	73	81	69	50	-39	-75	-93	-90	-93	-102	-97	-97	-89	-84	-67	-28	33	69	76	86	84	-3	294
PK	272	256	261	217	294	233	183	144	-33	-33	-17	83	-22	-22	-28	56	-39	0	44	178	239	250	217	239	294	
MIN	-56	-61	-56	-56	-56	-61	-61	-89	-156	-383	-133	-150	-161	-144	-139	-128	-111	-89	-61	-50	-56	-61	-67	-61	-61	

RELATIVE HUMIDITY @ 3M  
PERCENT

CB-TRACI  
TRAILER A423  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	63	64	65	65	58	50	50	51	40	45	44	44	44	44	44	44	44	44	44	45	47	47	48	49	50	65
2	53	52	48	47	47	47	47	47	40	44	44	44	44	44	44	44	44	44	44	40	47	47	47	49	40	53
3	67	71	74	72	72	72	75	84	84	84	84	84	83	79	76	76	75	69	68	72	76	79	83	83	77	84
4	83	82	82	81	81	81	83	83	83	80	70	67	59	70	74	55	50	60	64	62	63	70	74	77	73	83
5	78	78	77	77	78	76	76	76	73	63	51	50	46	46	44	44	45	45	45	46	49	53	57	57	60	78
6	57	55	54	54	53	53	53	51	48	45	44	44	44	44	44	44	44	44	44	44	46	49	50	53	48	57
7	65	73	77	79	80	81	82	81	81	78	62	51	45	65	70	76	68	70	68	72	77	80	82	82	73	82
8	80	82	79	75	78	79	82	85	85	72	56	54	48	46	47	47	48	48	48	48	51	52	56	60	63	85
9	62	63	63	64	64	64	60	58	55	49	48	47	46	45	45	45	45	45	45	45	45	46	47	47	52	64
10	47	49	47	47	51	50	50	52	53	50	46	44	44	44	45	45	45	45	45	45	45	45	45	46	47	53
11	46	47	47	47	48	49	49	48	46	45	45	45	45	45	45	45	45	45	45	45	45	46	47	47	47	50
12	49	49	49	49	49	49	49	48	40	45	45	45	45	45	45	45	45	45	45	45	46	46	47	47	47	49
13	47	47	47	48	49	51	53	55	51	48	47	47	46	46	45	45	45	45	45	45	45	48	51	56	48	56
14	58	59	59	59	60	62	64	63	60	52	49	48	47	46	45	45	45	46	56	57	61	65	65	66	56	66
15	68	69	73	72	74	80	81	77	77	71	68	65	58	55	50	49	49	49	52	82	82	82	81	82	69	82
16	82	81	82	80	80	82	82	82	80	63	57	70	61	52	51	49	47	47	46	46	46	46	46	48	63	82
17	48	46	46	45	47	49	49	49	49	49	50	52	55	60	62	63	63	63	63	62	54	46	45	44	53	63
18	44	44	44	44	44	44	44	42	42	50	52	54	55	57	59	60	60	63	63	59	55	49	44	44	51	63
19	44	44	44	45	45	46	46	53	63	73	74	74	74	75	75	76	78	78	79	78	73	61	48	47	62	79
20	45	46	48	47	45	45	45	47	52	56	61	69	70	72	73	75	76	76	75	73	61	46	44	44	58	76
21	44	44	44	44	44	44	45	46	48	51	53	54	56	57	62	62	65	66	66	61	54	49	46	45	52	68
22	45	45	47	45	45	45	45	45	49	86	80	84	84	85	85	85	85	85	85	84	80	62	55	51	71	80
23	49	46	45	45	45	45	45	47	49	57	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
24	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	(OE)	( )	60
25	51	52	52	53	56	56	56	56	57	56	52	46	45	45	45	45	45	45	44	45	45	45	44	45	49	57
26	45	45	45	45	45	47	49	45	46	46	45	44	44	44	44	44	44	44	44	44	44	44	44	45	45	49
27	46	47	47	47	48	49	51	53	54	56	51	47	40	44	44	44	44	44	44	44	45	46	52	62	48	62
28	68	70	70	74	80	81	82	83	82	74	65	56	52	48	46	44	44	44	44	44	44	44	46	47	60	83
29	50	53	57	59	60	62	64	65	68	67	61	56	52	47	45	44	44	44	44	44	44	44	44	47	53	68
30	50	52	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54

MONTHLY MINIMUM = 40

AV	56	57	58	58	59	59	60	61	61	59	56	55	53	53	54	53	53	53	54	55	54	53	53	54	50	86
PK	83	82	82	81	81	82	83	85	85	86	86	84	84	85	85	85	85	85	85	84	82	82	83	83	50	86
MIN	44	44	44	44	44	44	44	42	46	44	44	44	40	44	44	44	44	44	44	44	44	44	44	44	50	86

SOLAR RADIATION  
LANGLEY

CR-IRACI  
TRAILER AB23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

~ HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	IL PEAK		
1	0	0	0	0	0	0	7	21	22	46	38	49	66	59	55	35	21	8	1	0	0	0	0	0	427	66	
2	0	0	0	0	0	0	6	20	35	50	57	58	58	62	46	28	10	5	0	0	0	0	0	0	436	62	
3	0	0	0	0	0	0	1	3	3	6	16	34	41	34	37	36	24	8	1	0	0	0	0	0	243	41	
4	0	0	0	0	0	0	2	8	21	25	47	52	23	50	61	43	22	10	1	0	0	0	0	0	305	61	
5	0	0	0	0	0	0	11	28	42	54	66	71	71	67	59	47	31	14	1	0	0	0	0	0	502	71	
6	0	0	0	0	0	0	8	22	39	53	65	70	70	67	58	46	32	15	1	0	0	0	0	0	547	70	
7	0	0	0	0	0	0	2	7	31	38	22	15	24	22	36	5	10	5	0	0	0	0	0	0	217	38	
8	0	0	0	0	0	0	8	31	37	40	39	58	35	37	47	23	32	7	1	0	0	0	0	0	394	58	
9	0	0	0	0	0	0	8	23	40	53	65	70	70	66	59	47	31	14	1	0	0	0	0	0	548	70	
10	0	0	0	0	0	0	9	24	40	54	65	70	71	67	60	48	31	14	1	0	0	0	0	0	555	71	
11	0	0	0	0	0	0	9	25	40	54	68	68	71	68	61	48	33	14	1	0	0	0	0	0	500	71	
12	0	0	0	0	0	0	10	25	41	55	67	65	58	44	32	25	17	8	1	0	0	0	0	0	448	67	
13	0	0	0	0	0	0	11	25	40	40	54	36	31	31	32	23	14	10	2	0	0	0	0	0	345	51	
14	0	0	0	0	0	1	10	25	41	54	28	55	41	37	25	34	7	1	1	0	0	0	0	0	359	55	
15	0	0	0	0	0	0	2	13	14	16	35	33	68	57	60	34	24	2	0	0	0	0	0	0	358	68	
16	0	0	0	0	0	1	10	17	38	55	66	37	27	14	58	35	5	11	2	0	0	0	0	0	370	66	
17	0	0	0	0	0	1	9	25	41	54	69	37	37	53	53	34	32	16	2	0	0	0	0	0	463	69	
18	0	0	0	0	0	1	11	23	41	56	60	23	19	21	33	13	13	12	1	0	0	0	0	0	327	60	
19	0	0	0	0	0	0	2	8	16	55	43	57	75	70	60	44	34	17	2	0	0	0	0	0	484	75	
20	0	0	0	0	0	1	8	27	41	55	63	72	79	61	38	42	35	16	2	0	0	0	0	0	540	79	
21	0	0	0	0	0	2	12	28	44	53	59	62	50	11	19	16	19	10	1	0	0	0	0	0	386	62	
22	0	0	0	0	0	1	13	28	42	56	67	60	72	55	53	43	26	21	3	0	0	0	0	0	514	72	
23	0	0	0	0	0	1	13	28	44	58	67	73	73	71	62	50	34	17	3	0	0	0	0	0	596	73	
24	0	0	0	0	0	1	13	29	44	58	67	64	74	61	45	31	18	7	4	0	0	0	0	0	517	74	
25	0	0	0	0	0	1	11	22	44	60	64	71	76	62	65	47	22	13	4	0	0	0	0	0	563	76	
26	0	0	0	0	0	1	14	30	46	60	70	76	68	70	62	52	35	17	2	0	0	0	0	0	602	76	
27	0	0	0	0	0	1	14	30	45	59	59	68	59	62	40	39	37	23	5	0	0	0	0	0	541	68	
28	0	0	0	0	0	2	14	30	46	59	69	75	77	73	62	49	34	15	5	0	0	0	0	0	610	77	
29	0	0	0	0	0	2	11	28	45	58	68	72	76	71	62	51	36	19	4	0	0	0	0	0	603	76	
30	0	0	0	0	0	2	14	30	45	59	68	70	71	61	47	46	34	16	4	0	0	0	0	0	568	71	
IL	0	0	0	0	0	17	272	682	1111	1480	1676	1722	1732	1585	1488	1114	752	364	57	0	0	0	0	0	14054	79	
PK	0	0	0	0	0	2	14	31	46	60	70	76	79	73	65	52	37	23	5	0	0	0	0	0	0	0	0



BAROMETRIC PRESSURE  
MILLIBARS

CB-TRACI  
TRAILER A423  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOOR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	792	791	791	791	790	790	790	790	791	791	791	790	790	790	789	789	789	789	788	788	788	788	787	787	790	792
2	787	787	787	787	786	786	786	786	786	786	785	785	784	783	780	781	780	779	779	778	778	778	778	778	783	787
3	777	777	776	776	775	775	775	776	776	777	778	779	780	781	781	782	782	783	783	784	784	784	784	785	785	787
4	785	786	787	787	788	788	789	789	790	791	792	793	794	794	795	795	796	796	797	797	797	798	799	799	795	799
5	799	799	799	799	799	799	799	799	800	801	801	800	800	799	798	797	797	796	796	795	795	795	794	794	798	801
6	794	793	792	791	791	784	784	784	784	784	784	784	784	785	788	787	787	787	787	786	786	786	786	786	789	794
7	785	785	785	785	786	786	786	787	787	788	788	788	788	788	788	788	788	788	788	788	788	788	788	788	784	785
8	785	785	786	786	786	786	786	787	787	787	787	787	787	787	787	787	787	787	787	787	787	787	787	787	784	785
9	789	789	788	788	788	788	788	788	789	789	789	789	789	789	788	788	788	788	788	788	789	789	789	789	787	789
10	786	786	786	786	786	786	786	787	787	787	787	787	787	787	787	787	787	786	786	786	786	786	786	786	784	785
11	785	785	785	785	786	786	786	787	787	787	787	787	787	787	787	787	787	786	786	786	786	786	786	786	786	788
12	788	788	788	788	788	788	788	788	789	789	789	789	789	789	788	788	788	788	788	788	789	789	789	789	787	789
13	788	788	789	789	789	789	789	790	791	792	793	793	793	793	793	793	793	793	794	794	794	794	794	794	792	795
14	794	794	795	795	795	795	795	796	796	797	797	797	796	796	796	795	795	795	795	795	794	794	794	794	795	797
15	794	794	794	794	794	794	794	794	795	795	795	795	794	794	794	794	793	793	793	793	794	794	794	794	794	795
16	794	794	794	793	793	793	794	794	795	795	795	795	794	794	792	792	791	791	791	791	791	791	791	791	792	795
17	791	791	790	790	790	790	791	791	791	791	791	791	791	790	790	789	789	788	788	788	788	788	788	788	790	791
18	788	788	787	787	787	787	787	787	787	786	786	785	785	784	784	784	783	783	783	784	785	786	786	786	786	788
19	786	786	786	786	786	786	787	787	787	787	787	786	786	786	787	787	787	787	787	787	787	787	787	787	786	788
20	789	789	789	789	789	789	789	789	788	788	788	788	788	787	787	787	787	787	786	786	786	786	786	786	786	788
21	788	788	788	788	788	788	787	787	787	786	786	785	785	785	785	785	784	784	784	785	786	786	787	787	787	789
22	787	787	787	788	788	788	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	789	787	789
23	791	791	791	791	791	791	792	792	792	792	792	792	791	791	790	790	790	789	789	789	789	789	789	789	789	791
24	789	789	789	789	789	789	789	789	789	789	789	789	789	788	788	787	787	786	786	786	786	786	786	786	787	789
25	786	786	786	786	786	786	786	787	787	787	787	787	787	786	786	786	785	785	785	785	785	785	785	785	786	787
26	785	785	785	785	785	785	786	786	786	787	787	787	787	787	786	786	785	785	785	785	785	785	785	785	786	787
27	786	786	786	786	787	787	788	788	789	789	790	790	790	789	789	788	788	788	788	788	788	788	788	788	787	789
28	789	790	789	790	790	790	790	790	790	790	790	789	791	795	795	795	795	795	795	795	795	795	795	795	792	795
29	795	795	795	795	795	796	796	796	796	794	787	786	785	785	785	784	784	785	792	793	793	794	794	794	792	796
30	795	795	795	795	795	795	796	795	796	789	787	795	789	786	788	784	784	784	784	784	785	785	785	785	790	796

MONTHLY MINIMUM = 775

AV	789	784	789	789	789	789	789	789	790	789	789	789	789	789	789	788	788	788	788	788	788	789	789	789	789	789
PK	799	799	799	799	799	799	799	799	800	801	801	800	800	799	798	797	797	796	797	797	797	797	797	797	799	801
MN	777	777	776	776	775	775	775	775	776	777	778	779	780	781	780	781	780	779	779	779	778	778	778	778	778	778

PRECIPITATION  
CM\*100

CH-FRACT  
TRAILER AB20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TL PEAK
1																									( )
2																									( )
3						3	3	8	38	23	5	23													102 38
4						8	5 (1R)		3																15 8
5																									( )
6																									( )
7																									( )
8																									( )
9																									( )
10																									( )
11																									( )
12																									( )
13																									( )
14																									( )
15																									( )
16																									( )
17																									( )
18																									( )
19																									( )
20																				8	5				13 8
21																									( )
22																									( )
23																									( )
24																									( )
25																									( )
26																									( )
27																									( )
28																									( )
29																									( )
30																									( )
TL	( )	( )	( )	( )	( )	10	8	8	41	23	5	23	( )	( )	( )	( )	( )	( )	10	8	5	( )	( )	( )	140
PK						8	5	8	38	23	5	23							10	8	5				38



PRECIPITATION  
CM\*100

CB-IRACI  
TRAILER AR23  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	1L PEAK
1																									( )
2																									( )
3							5	8	25	25	25	10	3	3	13										114
4					5	8		(1R)	3																20
5																									( )
6																									( )
7																									( )
8																									( )
9																									( )
10																									( )
11																									( )
12																									( )
13																									( )
14																									( )
15																									( )
16																									( )
17																									( )
18																									( )
19																									( )
20																									( )
21																									( )
22																									( )
23																									( )
24																									( )
25																									( )
26																									( )
27																									( )
28																									( )
29																									( )
30																									( )
1L	( )	( )	( )	( )	5	8	5	8	25	28	25	10	5	3	13	( )	( )	( )	8	5	5	( )	( )	( )	152
PK					5	8	5	8	25	25	25	10	3	3	13			8	5	3	5	( )	( )	( )	25

EVAPORATION

C-B TRACT  
TRAILER AB23  
April, 1981

NOT OPERATIONAL

INVERSION HEIGHT  
METERS

CB-IRACI  
TRAILER AC20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE	PEAK
1	320	320	330	295	280	285	265	190	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	100	240	290	285	260	280	267	330
2	300	280	230	275	300	280	280	270	190	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	200	270	215	225	220	200	200	246	300
3	300	320	330	240	210	220	230	30	(NV)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	(WR)	170	150	( )	330
4	205	215	240	210	220	210	130	130	115	30	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	170	210	205	230	295	176	295
5	260	230	235	235	215	220	225	230	100	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	60	290	270	205	205	260	216	290
6	300	250	240	220	250	230	210	190	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	110	230	295	260	295	260	239	300
7	290	235	320	310	305	315	550	500	415	200	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	250	325	290	310	305	320	345	312	550
8	270	205	195	240	295	400	440	405	260	80	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	205	270	305	400	370	(IM)	273	440
9	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(NV)	(NV)	150	200	300	295	280	280	( )	300
10	325	300	350	370	335	400	350	230	60	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	50	200	215	280	290	295	270	400
11	315	320	375	350	405	465	420	360	190	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	130	200	305	400	410	350	333	465
12	270	405	420	360	390	480	435	370	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	50	190	230	230	225	240	307	480
13	285	230	230	235	300	280	280	250	40	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	140	310	320	280	310	235	320
14	300	305	320	320	380	370	390	330	30	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	60	210	350	330	240	205	276	390
15	260	260	305	220	200	280	250	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	110	315	440	505	400	350	315	515
16	405	405	490	490	510	550	490	300	190	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	60	340	400	410	440	530	401	550
17	530	590	600	600	595	600	580	490	205	30	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	210	395	415	420	440	447	600
18	360	530	400	330	380	370	340	205	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	130	220	225	220	220	150	291	530
19	205	205	215	215	230	310	380	395	300	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	230	230	305	380	285	350	286	395
20	460	410	415	440	390	400	400	305	150	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	165	315	360	350	380	333	460
21	305	370	495	500	480	415	415	300	40	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	215	325	500	500	570	440	384	570
22	370	340	405	400	400	490	460	330	300	30	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	40	180	305	405	380	405	328	490
23	430	370	340	315	400	430	320	305	130	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	160	320	360	360	300	390	326	430
24	400	430	420	400	380	390	400	305	120	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	190	360	430	500	500	515	374	515
25	490	520	520	500	560	520	400	330	130	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	100	220	300	310	310	330	374	560
26	380	370	395	350	395	360	285	240	120	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	40	150	240	300	310	310	283	395
27	370	395	360	320	400	405	305	260	100	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	30	160	225	260	205	230	268	405
28	300	315	415	450	400	420	430	320	105	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	90	270	300	300	300	315	450
29	310	420	410	405	470	445	450	380	180	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	40	150	280	325	305	335	327	470
30	395	440	400	380	385	320	300	130	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	(NV)	100	300	305	290	305	312	440
AV	335	344	359	344	361	374	359	289	158	( )	( )	( )	( )	( )	( )	( )	( )	( )	107	206	297	326	312	318	304	
PK	530	590	600	600	595	600	580	500	415	200	( )	( )	( )	( )	( )	( )	30	250	325	440	515	505	570	530		600

STABILITY CLASS @ 50M  
0=STB 1=UNST

CB-IRACI  
THAILIN AC20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
PR	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0

STABILITY CLASS @ 200M  
0=STB 1=UNST

CB-TRACT  
TRAILER AC20  
APR 1981  
OCCIDENTAL OIL SHALE INC.

HOUR (LOCAL STANDARD TIME)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	PREV
1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	1	1	(WH)	(WH)	(WH)	(WH)	(WH)	(WH)	(WH)	(WH)	(WH)	(WH)	(WH)	(WH)	(WH)	1	1	( )
4	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1
5	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
6	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1
7	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
8	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	(IM)	0
9	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	(IM)	1	1	1	1	0	0	0	0	( )
10	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1
13	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1
14	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1
15	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
30	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
PV	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0



STABILITY CLASS USING DT/DZ  
DT 60-10M  
WS 10M

CB-TRACT  
TRAILER AA23  
APH 1981  
OCCIDENTAL OIL SHALE, INC.

		HOUR (LOCAL STANDARD TIME)																										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE		
1	E	E	D	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	D	F	E	D	E
2	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	D	F	E	D	E
3	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	D	F	E	D	E
4	E	E	E	E	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	F	D	F	E	D	E
5	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	F	D	F	E	D	E
6	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
7	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
8	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	D	F	E	D	E
9	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	D	F	E	D	E
10	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
11	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
12	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
13	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
14	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	F	D	F	E	D	E
15	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	D	F	E	D	E
16	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	F	D	F	E	D	E
17	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	F	D	F	E	D	E
18	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	F	D	F	E	D	E
19	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	F	D	F	E	D	E
20	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	F	D	F	E	D	E
21	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
22	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
23	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
24	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
25	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
26	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
27	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
28	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E
29	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	F	D	F	E	D	E
30	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	E	E	E	F	D	F	E	D	E
AVE	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	F	D	F	E	D	E

TOTAL OCCURRENCES: A= 2 B= 80 C= 67 D=254 E=182 F=128 HOURS MISSING= 7

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

NITRIC OXIDE (NO)

C-B SHALE OIL PROJECT

TRAILER AB20 PERIOD( 4/01/81 TO 4/30/81)

CONCENTRATION MAX UG/M**3	WIND DIRECTION																NW	NNW	CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW						
GT 130. :	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
LT 10. :	7	7	2	8	88	128	50	17	30	33	45	29	41	40	24	24	84	657		
TOTAL :	7	7	2	8	88	128	50	17	30	33	45	29	41	40	24	24	84	657		
MEAN CONC.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

0 = NO OBSERVATIONS

II-517

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

NITRIC OXIDE (NO)

C-B SHALE OIL PROJECT

PERIOD( 4/01/81 TO 4/30/81)

TRAILER AB23

WIND DIRECTION

CONCENTRATION MAX UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
3	2	3	3	8	6	4	4	4	6	4	6	4	6	6	6	9	6	

GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	5	2	1	3	7	4	6	5	23	28	34	8	7	9	4	12	2	160
TOTAL :	5	2	1	3	7	4	6	5	23	28	34	8	7	9	4	12	2	160
MEAN CONC.	2	2	3	3	4	3	3	3	2	1	1	1	3	4	4	6	4	2

0 = NO OBSERVATIONS



NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

OXIDES OF NITROGEN (NOX)

C-B SHALE OIL PROJECT

TRAILER AB20 PERIOD( 4/01/81 TO 4/30/81)

CONCENTRATION MAX UG/M**3	WIND DIRECTION										NW	NNW	CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW

GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	7	7	2	8	88	128	50	17	30	33	45	29	41	40	24	24	84
TOTAL :	7	7	2	8	88	128	50	17	30	33	45	29	41	40	24	24	84

II-1519

MEAN  
CONC.

0 = NO OBSERVATIONS

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

OXIDES OF NITROGEN (NOX) C-B SHALE OIL PROJECT

TRAILER AB23 PERIOD( 4/01/81 to 4/30/81)

CONCENTRATION MAX UG/M*3	N	NNE	NE	ENE	E	ESE	SE	SSE	WIND DIRECTION				W	WNW	NW	NNW	CALM	TOTAL
									S	SSW	SW	WSW						
77	3	7	11	18	11	7	75	73	75	75	75	75	75	75	15	77	73	

GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	1	0	0	0	0	0	0	1	1	3	4	2	3	4	0	3	1	23
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
10. - 20. :	0	0	0	1	1	1	0	0	1	0	3	0	1	1	3	4	0	16
LT 10. :	4	2	1	2	6	3	6	4	21	25	26	6	3	4	1	1	1	116
TOTAL :	5	2	1	3	7	4	6	5	23	28	34	8	7	9	4	12	2	160

MEAN CONC. 20 3 7 6 7 6 4 19 5 9 12 19 35 38 11 33 41 15

0 = NO OBSERVATIONS



# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

## NITROGEN DIOXIDE (NO2)

## C-B SHALE OIL PROJECT

PERIOD( 4/01/81 TO 4/30/81)

TRAILER AB20

WIND DIRECTION

CONCENTRATION MAX UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	7	7	2	8	88	128	50	17	30	33	45	29	41	40	24	24	84	657
TOTAL :	7	7	2	8	88	128	50	17	30	33	45	29	41	40	24	24	84	657
MEAN CONC.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = NO OBSERVATIONS

NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

C-B SHALE OIL PROJECT

NITROGEN DIOXIDE (NO2)

PERIOD( 4/01/81 TO 4/30/81)

TRAILER AB23

WIND DIRECTION

CONCENTRATION MAX UG/M*3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
	75	0	1	5	5	1	0	69	67	75	73	69	71	71	5	71	67	
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	1	0	0	0	0	0	0	0	0	2	1	0	1	2	0	1	0	8
60. - 70. :	0	0	0	0	0	0	0	1	1	1	3	2	2	2	0	2	1	15
50. - 60. :	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
LT 10. :	4	2	1	3	7	4	6	4	22	25	29	6	4	5	4	5	1	132
TOTAL :	5	2	1	3	7	4	6	5	23	28	34	8	7	9	4	12	2	160
MEAN CONC.	15	0	1	1	1	0	0	14	3	7	10	17	30	31	3	23	33	11

0 = NO OBSERVATIONS

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

OZONE (03)

C-B SHALE OIL PROJECT

PERIOD( 4/01/81 TO 4/30/81)

TRAILER AB20

WIND DIRECTION

CONCENTRATION MAX UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
	76	74	58	66	74	78	66	74	74	78	76	76	74	72	76	76	74	74
GT 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
240. - 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220. - 240. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200. - 220. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180. - 200. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160. - 180. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140. - 160. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 140. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 80. :	2	2	0	3	4	5	8	11	23	28	35	24	16	13	10	8	7	199
40. - 60. :	4	4	2	2	30	43	18	6	7	5	11	6	29	26	12	15	22	242
20. - 40. :	0	1	0	3	30	58	18	0	0	0	0	1	1	0	1	0	31	144
LT 20. :	0	0	0	0	22	18	6	0	0	0	0	0	0	0	0	0	16	62
TOTAL :	6	7	2	8	86	124	50	17	30	33	46	31	46	39	23	23	76	647
MEAN CONC.	60	54	49	47	35	36	42	63	65	67	66	65	57	57	58	61	36	48

0 = NO OBSERVATIONS



# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

OZONE (03)

C-B SHALE OIL PROJECT

TRAILER AB23 PERIOD( 4/01/81 TO 4/30/81)

CONCENTRATION MAX UG/M**3	N 125	NNE 125	NE 123	ENE 125	E 129	ESE 117	SE 127	SSE 129	S 125	WIND DIRECTION				WNW 125	NW 121	NNW 127	CALM 117	TOTAL
										SSW	SW	WSW	W					

GT 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140. - 260. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 240. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 220. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180. - 200. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160. - 180. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
140. - 160. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 140. :	3	3	1	1	1	0	3	2	3	16	45	14	0	1	2	1	0	96
100. - 120. :	17	9	6	8	11	7	10	10	50	80	71	24	12	10	16	23	1	365
80. - 100. :	9	7	3	6	7	9	8	11	19	37	26	17	11	6	11	16	3	206
60. - 80. :	0	0	2	2	0	2	0	1	2	4	8	5	6	2	1	1	3	39
40. - 60. :	0	1	0	0	0	0	0	1	1	0	2	1	1	2	0	1	0	10
20. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
LT 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL :	29	20	12	17	19	18	21	25	75	137	152	61	30	21	30	43	7	717
MEAN CONC.	105	103	99	98	101	96	104	100	104	107	111	106	94	94	103	100	82	104

0 = NO OBSERVATIONS

II-524  
II-522

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

CARBON MONOXIDE (CO)

C-B SHALE OIL PROJECT

PERIOD( 4/01/81 TO 4/30/81)

WIND DIRECTION

CONCENTRATION MAX UG/M**3	WIND DIRECTION																		TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM		
GT 4000.	3	1	0	1	4	4	4	5	3	5	5	8	6	1	3	2	4		
3750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LT 1000.	7	7	2	8	88	128	50	17	30	33	46	31	43	40	24	24	84	662	
TOTAL	7	7	2	8	88	128	50	17	30	33	46	31	43	40	24	24	84	662	
MEAN	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	

0 = NO OBSERVATIONS



NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

CARBON MONOXIDE (CO)

C-B SHALE OIL PROJECT

TRAILER AB23 PERIOD( 4/01/81 TO 4/30/81)

WIND DIRECTION

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
CONCENTRATION	137	183	22	0	22	22	0	11	22	34	91	34	22	22	160	160	22	
MAX																		
UG/M**3																		

GT 4000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2000.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1750.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1500.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1250.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1000.	28	19	12	17	19	18	21	25	75	137	152	60	30	21	31	44	7	716
TOTAL	28	19	12	17	19	18	21	25	75	137	152	60	30	21	31	44	7	716
MEAN CONC.	18	33	1	0	2	1	0	1	0	0	2	1	2	2	15	15	4	4

0 = NO OBSERVATIONS

# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

SULFUR DIOXIDE (SO2)

C-B SHALE OIL PROJECT

PERIOD( 4/01/81 TO 4/30/81)

TRAILER AB20

WIND DIRECTION

CONCENTRATION MAX UG/M**3	WIND DIRECTION																NW	NNW	CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	W	WNW				
GT 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LT 10. :	7	7	2	8	88	128	50	17	30	33	46	31	46	41	24	24	84	84	666	666
TOTAL :	7	7	2	8	88	128	50	17	30	33	46	31	46	41	24	24	84	84	666	666
MEAN CONC.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0 = NO OBSERVATIONS

C-B SHALE OIL PROJECT

**AB23**

## DIRECTION

: CONCENTRATION  
MAX  
UG/M\*\*3

GT 130

120. - 130

110. - 120

2100. - 110

190. - 1001

180. - 90

170. - 80

160. - 70

150. - 60

40. - 50

30. - 40

20. - 30

10. - 20

LT 10

TOTAL

MEAN.  
CONC.  
II-5

0 = NO OBSERVATIONS

II-528  
- - -



# NUMBER OF ONE HOUR SAMPLES BY CONCENTRATION AND WIND DIRECTION AT 10 METERS

HYDROGEN SULFIDE (HRS)

C-B SHALE OIL PROJECT

TRAILER AB23 PERIOD( 4/01/81 TO 4/30/81)

CONCENTRATION MAX UG/M*3	WIND DIRECTION																			NW	NNW	CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW									
GT 130. :	1	0	0	0	0	0	0	1	0	1	1	1	0	0	0	1	1	0					
120. - 130. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
110. - 120. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
100. - 110. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
90. - 100. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
80. - 90. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
70. - 80. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
60. - 70. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
50. - 60. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
40. - 50. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
30. - 40. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
20. - 30. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
10. - 20. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
LT 10. :	26	16	10	17	19	18	21	22	73	136	151	59	25	19	28	40	7	7	687				
TOTAL :	26	16	10	17	19	18	21	22	73	136	151	59	25	19	28	40	7	7	687				
MEAN CONC.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

0 = NO OBSERVATIONS

11-529

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

C-B SHALE OIL PROJECT

STATION AB20 PERIOD( 4/01/81 TO 4/30/81)

## WIND DIRECTION

WIND SPEED MAX METERS/SEC	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
3	3	3	1	2	4	4	4	4	4	4	4	4	4	4	4	4	4	2
GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. - 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. - 8. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3. - 5. :	1	1	0	0	2	5	28	5	24	24	30	15	12	11	3	4	0	165
1. - 3. :	6	5	2	4	55	98	21	10	5	9	15	15	28	28	19	20	3	343
LT 1. :	0	1	0	4	34	27	2	2	1	0	1	1	7	2	3	0	3	88
TOTAL :	7	7	2	8	91	130	51	17	30	33	46	31	47	41	25	24	6	596
PERCENT	1.	1.	0.	1.	15.	22.	9.	3.	5.	6.	8.	5.	8.	7.	4.	4.	1.	100.

0 = NO OBSERVATIONS



# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

C-B SHALE OIL PROJECT

STATION AA23 PERIOD( 4/01/81 TO 4/30/81)

## WIND DIRECTION

WIND SPEED MAX METERS/SEC	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
8. - 11. :	0	0	0	0	0	0	0	0	2	3	2	0	0	0	0	0	0 :	7
5. - 8. :	0	0	0	0	0	0	0	0	12	33	62	11	3	2	2	1	0 :	126
3. - 5. :	5	2	0	1	1	0	1	2	34	47	44	18	5	4	9	12	0 :	185
1. - 3. :	20	15	8	7	12	13	15	16	15	35	31	22	14	6	16	27	0 :	272
LT 1. :	5	3	4	9	6	5	5	7	12	19	13	10	8	9	4	4	0 :	123
TOTAL :	30	20	12	17	19	18	21	25	75	137	152	61	30	21	31	44	0	713
PERCENT	4.	3.	2.	2.	3.	3.	3.	4.	11.	19.	21.	9.	4.	3.	4.	6.	0.	100.

0 = NO OBSERVATIONS

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

30 METER LEVEL

C-B SHALE OIL PROJECT

STATION AA23 PERIOD( 4/01/81 TO 4/30/81)

## WIND DIRECTION

WIND SPEED MAX METERS/SEC	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
GT 11. :	0	0	0	0	0	0	0	0	2	1	2	0	0	0	0	0	0	5
8. - 11. :	0	0	0	0	0	0	0	2	15	35	34	2	1	2	0	0	0	91
5. - 8. :	0	0	0	0	0	0	0	4	30	55	33	12	3	3	8	4	0	152
3. - 5. :	12	6	2	1	2	2	6	13	21	27	25	13	5	3	14	20	0	172
1. - 3. :	12	10	5	7	9	18	20	14	10	13	7	9	15	14	24	18	0	205
LT 1. :	5	6	2	5	9	3	7	3	5	10	10	6	8	4	6	1	0	90
TOTAL :	29	22	9	13	20	23	33	36	83	141	111	42	32	26	52	43	0	715
PERCENT	4.	3.	1.	2.	3.	3.	5.	5.	12.	20.	16.	6.	4.	4.	7.	6.	0.	100.

0 = NO OBSERVATIONS

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

60 METER LEVEL

C-B SHALE OIL PROJECT

STATION AA23 PERIOD( 4/01/81 TO 4/30/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
GT 11. :	0	0	0	0	0	0	0	0	3	3	6	0	0	0	0	0	0	12
8. - 11. :	1	0	0	0	0	0	0	0	12	47	71	6	5	2	2	0	0	146
5. - 8. :	2	0	0	0	0	0	0	2	11	37	56	18	4	2	7	5	0	144
3. - 5. :	20	10	6	1	1	4	4	10	16	15	18	13	7	5	11	29	0	170
1. - 3. :	15	11	6	5	5	10	15	8	14	21	9	6	16	13	13	24	0	191
LT 1. :	1	3	3	3	2	4	4	4	4	4	4	4	3	6	2	4	0	55
TOTAL :	39	24	15	9	8	18	23	24	60	127	164	47	35	28	35	62	0	718
PERCENT	5.	3.	2.	1.	1.	3.	3.	3.	8.	18.	23.	7.	5.	4.	5.	9.	0.	100.

0 = NO OBSERVATIONS

FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

10 METER LEVEL

STATION AD42 PERIOD 4/1/81 - 4/30/81

DATA NOT AVAILABLE AT REPORT TIME

FREQUENCY TABLE OF WIND SPEED BY DIRECTION

C-B SHALE OIL PROJECT

10 METER LEVEL

STATION AD56 PERIOD 4/1/81 - 4/30/81

DATA NOT AVAILABLE AT REPORT TIME



FIVE MAXIMUM SLIDING AVERAGE  
UG/M\*\*3

C-B TRACT  
SITE AB20  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR (BEG)	VALUE
S02	3 HR	1	0	0	0.0
		2	0	0	0.0
		3	0	0	0.0
		4	0	0	0.0
		5	0	0	0.0
S02	24 HR	1	0	0	0.0
		2	0	0	0.0
		3	0	0	0.0
		4	0	0	0.0
		5	0	0	0.0
C0	1 HR	1	8	17	0.0
		2	8	18	0.0
		3	2	20	0.0
		4	8	16	0.0
		5	8	19	0.0
C0	8 HR	1	8	13	0.0
		2	10	12	0.0
		3	19	16	0.0
		4	13	16	0.0
		5	6	15	0.0
03	1 HR	1	5	12	78.5
		2	6	18	78.5
		3	9	13	78.5
		4	1	15	76.5
		5	4	13	76.5
PART	24 HR	1	24	1	50.9
		2	30	1	28.7
		3	27	1	19.9
		4	12	1	17.3
		5	15	1	15.8

FIVE MAXIMUM SLIDING AVERAGE  
UG/H\*\*3

C-B TRACT  
SITE AB23  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR (BEG)	VALUE
SO2	3 HR	1	6	13	0.9
		2	6	13	0.0
		3	6	13	0.0
		4	6	13	0.0
		5	6	13	0.0
SO2	24 HR	1	5	16	0.1
		2	5	16	0.0
		3	5	16	0.0
		4	5	16	0.0
		5	5	16	0.0
CO	1 HR	1	30	18	200.0
		2	29	18	200.0
		3	29	19	200.0
		4	30	17	200.0
		5	29	17	100.0
CO	8 HR	1	29	14	100.0
		2	30	13	100.0
		3	28	13	0.0
		4	27	14	0.0
		5	4	24	0.0
O3	1 HR	1	17	15	139.3
		2	17	17	139.3
		3	17	16	137.3
		4	17	18	137.3
		5	17	14	135.4
PART	24 HR	1	18	1	21.0
		2	27	1	17.5
		3	30	1	17.3
		4	12	1	16.7
		5	21	1	14.7

ERROR IN FILE SEARCH NR

FIVE MAXIMUM SLIDING AVERAGE  
UG/H\*\*3

C-B TRACT  
SITE AD56  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

COMPONENT	AVG. TIME	RANK	DAY	HOUR(BEG)	VALUE
PART	24 HR				
		1	30	1	12.3
		2	27	1	12.2
		3	15	1	10.3
		4	21	1	7.2
		5	9	1	6.3

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB20  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

NO	NO <sub>x</sub>	NO <sub>2</sub>	O <sub>3</sub>	CO	SO <sub>2</sub>
----	-----------------	-----------------	----------------	----	-----------------

MULTIPOINT  
RECORDER \*

96	96	96	95	97	97
----	----	----	----	----	----

DATA ACQUISITION  
SYSTEM

OTHER SYSTEMS

EFFICIENCY	96	96	96	95	97	97
------------	----	----	----	----	----	----

\* Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB20  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

WS	WD	SIGMA HWD 10m	TEMP	INVERS. HT	STB 50m	STB 200m	PART	PRECIP.
----	----	------------------	------	---------------	------------	-------------	------	---------

MULTIPOINT  
RECORDER \*

93	93		58					
----	----	--	----	--	--	--	--	--

DATA ACQUISITION  
SYSTEM

OTHER SYSTEMS

				98	98	98	100	100
--	--	--	--	----	----	----	-----	-----

EFFICIENCY

93	93	0	58	98	98	98	100	100
----	----	---	----	----	----	----	-----	-----

\* Serves as Back-up to Data Acquisition System



SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
TRAILER AB23  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

NO NO<sub>x</sub> NO<sub>2</sub> O<sub>3</sub> SO<sub>2</sub> H<sub>2</sub>S CO BAR PRESS. SOLAR RAD.

MULTIPOINT  
RECORDER \*

DATA ACQUISITION  
SYSTEM

22 22 22 100 98 95 100 100 100

OTHER SYSTEMS

22 22 22 100 98 95 100 100 100

EFFICIENCY

\* Serves as Back-up to Data Acquisition System

C-b TRACT  
TRAILER AB23  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

SOURCE OF DATA REPORTED  
PERCENT

TMP 10m	TMP 30m	TMP 60m	DT 60-10m	RH	PART	PREC
------------	------------	------------	--------------	----	------	------

MULTIPOINT  
RECORDER \*

DATA ACQUISITION  
SYSTEM

100	100	100	100			
-----	-----	-----	-----	--	--	--

OTHER SYSTEMS

				94	100	100
--	--	--	--	----	-----	-----

EFFICIENCY

100	100	100	100	94	100	100
-----	-----	-----	-----	----	-----	-----

\* Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-bTRACT  
TRAILER AB23  
APR 1981  
OCCIDENTAL OIL SHALE, INC.

SIGMA HWD 10m	SIGMA HWD 30m	SIGMA HWD 60m	WS 10m	WS 30m	WS 60m	WD 10m	WD 30m	WD 60m
------------------	------------------	------------------	-----------	-----------	-----------	-----------	-----------	-----------

MULTIPOINT  
RECORDER \*

DATA ACQUISITION  
SYSTEM

100	100	100	100	100	100	100	100	100
-----	-----	-----	-----	-----	-----	-----	-----	-----

OTHER SYSTEMS

100	100	100	100	100	100	100	100	100
-----	-----	-----	-----	-----	-----	-----	-----	-----

EFFICIENCY

\*Serves as Back-up to Data Acquisition System

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
SITE AD42

APR 1981  
OCCIDENTAL OIL SHALE, INC.

WS 10m  
WD 10m  
TMP 10m

OTHER SYSTEMS

EFFICIENCY

SOURCE OF DATA REPORTED  
PERCENT

C-b TRACT  
SITE AD56

APR 1981  
OCCIDENTAL OIL SHALE, INC.

WS  
10m

WD  
10m

TMP  
10m

PART

OTHER SYSTEMS

100

EFFICIENCY

100



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### 2.3.10 Data Corrections

This section contains cumulative cross-indexes for all quarterly and semi-annual data reports. Table 2.3.10-1 is a cross-index to corrections included in this report. Data correction tables that were presented in other quarterly and semi-annual data reports are listed on Table 2.3.10-2.

Table 2.3.10-1  
Cross Index to Corrections Reported  
In C-6 Data Report #6

Semi Annual Report Containing Page Correction No.	Semi Annual Report Containing Incorrect Data / Page No.	Station No.	Year	Month	Constituent Identification
#6/II - 549	Development Monitoring Report #5 II-502	AA23	1980	Oct	Delta Temperature
II - 550	Report #5 II-560	AA23	1980	Nov	Hydrogen Sulfide



DELTA TEMPERATURE 60-10M  
DEGREE C\*100

CH-TRACT  
TRAILER AA23  
OCT 1980  
OCCIDENTAL OIL SHALE INC.

DAY	HOUR (LOCAL STANDARD TIME)																								AVE PEAK
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	228	272	189	239	244	328	211	239	-22	-100	-172	(IM)	(IM)	(IM)	-106	-94	-72	-17	17	11	72	94	139	94	85
2	78	67	100	94	117	50	128	0	-78	-94	-111	-117	-111	-106	-106	-94	-72	-6	44	39	133	256	256	256	30
3	333	61	50	122	222	50	(PF)	356	-289	-133	-100	-111	-106	-100	-106	-83	-72	-28	28	17	78	372	233	239	45
4	222	228	167	239	294	261	256	283	-33	-67	-100	-144	-122	-144	-89	-83	-61	-17	56	111	167	228	122	106	78
5	133	183	156	206	206	272	222	128	-50	-94	-117	-111	-122	-167	-239	-111	-61	-100	-133	0	33	39	194	139	25
6	84	217	206	94	156	206	194	156	-50	-50	-122	(IM)	(IM)	(IM)	-128	-106	-78	-28	39	6	44	83	256	233	67
7	211	167	228	228	167	217	267	50	17	-122	-100	-94	-106	-111	-100	-89	-72	-6	11	33	67	122	61	128	49
8	206	200	167	228	250	172	183	133	-56	-106	-106	-100	-106	-206	-122	-89	-61	6	39	-44	-28	200	244	283	54
9	217	111	106	122	117	206	250	67	-44	-78	-111	-78	-167	-117	-161	-239	-306	-150	-111	-6	33	11	78	111	-6
10	194	83	56	61	74	50	56	-33	-83	-100	-106	-111	-111	-106	-106	-89	-61	-11	33	83	100	83	217	178	15
11	244	167	117	183	250	283	283	233	139	-61	-89	-100	-106	-106	-106	-106	-78	-11	111	172	206	211	200	200	93
12	133	156	122	89	144	78	28	-39	-78	-89	-106	-89	-67	-89	-56	-67	-61	-50	-28	-22	-33	-44	-44	-33	-10
13	-6	0	-6	-17	-17	-44	-28	-39	-67	-83	-94	-111	-106	-106	-106	-94	-83	-39	33	44	11	0	-33	-56	-44
14	50	50	28	89	94	94	67	6	-33	-67	-78	-83	-94	-94	-83	-50	-78	50	11	39	22	-22	-56	-28	-5
15	-33	-22	11	17	11	-11	-28	-50	-83	-89	-94	-89	-83	-72	-122	-106	-78	-61	-39	-44	-44	-50	-50	-50	-53
16	-67	-44	-61	-33	-56	-67	-67	-72	-78	-94	-89	-72	-56	-78	-83	-61	-44	-50	-33	-28	-50	-61	-56	-56	-61
17	-61	-61	-50	-61	-39	11	6	-33	-67	-78	-83	-94	-100	-89	-83	-89	-22	-22	-28	22	44	50	6	6	-38
18	17	17	44	11	6	11	28	-6	-17	-67	-78	-89	-89	-83	-72	-72	-67	-17	100	133	100	44	67	44	-1
19	83	128	144	94	89	89	67	89	-50	-67	-72	-89	-94	-83	-94	-89	-67	-11	22	50	33	17	94	139	18
20	128	139	128	161	133	111	94	111	-33	-67	-78	-83	-89	-67	-83	-78	-67	-28	33	72	117	78	139	183	40
21	178	139	133	161	178	94	172	172	-22	-78	-83	-83	-78	-83	-72	-78	-72	22	117	106	78	111	78	83	49
22	83	72	33	33	-6	22	11	28	-39	-94	-100	-106	-83	-33	-44	-22	-44	-28	-6	-28	-39	-22	6	11	-16
23	33	39	0	-11	-28	-17	6	-44	-89	-72	-94	-117	-106	-106	-106	-94	-67	-22	-17	6	22	78	139	178	-20
24	144	122	156	167	128	106	150	172	-6	-83	-83	-89	-83	-83	-78	-89	-72	28	117	128	150	156	150	178	58
25	100	94	178	200	200	233	228	178	-17	-61	-89	-89	-89	-89	-94	-78	-56	-33	100	111	144	106	83	167	59
26	44	89	39	33	50	56	6	-28	-67	-83	-94	-89	-94	-89	-83	-78	-78	-72	-67	-44	-50	-50	-56	-56	-36
27	-67	-72	-72	-67	-67	-61	-67	-67	-67	-72	-89	-94	-100	-89	-78	-83	-72	-56	-50	-44	-17	6	22	28	-58
28	17	6	28	-22	-6	-22	11	-11	-56	-78	-83	-83	-89	-100	-83	-78	-72	-44	6	-6	-6	-11	50	78	28
29	67	167	156	61	33	78	133	89	-33	-67	-67	-67	-67	-78	-78	-78	-56	-6	56	156	106	150	189	44	37
30	144	139	89	133	83	100	128	194	-22	-61	-67	-83	-83	-83	-89	-78	-56	17	94	83	67	133	133	144	44
31	144	128	183	211	167	172	150	156	106	-61	-83	-83	-72	-72	-78	-72	-44	56	139	156	94	117	167	222	75

MONTHLY MINIMUM = -306

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	AVE
AV	106	98	91	99	103	101	105	78	-44	-81	-95	-95	-96	-98	-98	-88	-71	-24	22	42	53	80	98	103	18
PK	333	272	228	239	294	328	283	356	139	-50	-67	-67	-56	-33	-44	-22	-22	56	139	172	206	372	256	293	372
MIN	-67	-72	-72	-67	-67	-67	-67	-72	-289	-133	-172	-144	-167	-206	-239	-239	-306	-150	-133	-44	-50	-61	-56	-56	-56

CB-TRACT  
TRAILER AB23  
NOV 1980  
OCCIDENTAL OIL SHALE INC.

II-550

## DOWNTIME HOURS FOR C-b SHALE OIL PROJECT

II-551

## MONTHLY AVERAGES

Quarterly Report Containing the Correction Page No.	Quarterly Report Containing Incorrect Data Page No.	Station No.	Year	Month	Constituent Identification
6/II B-1518	5/II C-106	020, 021, 022, 023, 024	1975	August	NMHC, CO, Ozone, Barometric Pressure, Total Precipitation, Particulate
6/II B-1566	5/II C-439	020, 021, 022, 023, 024	1975	Sept.	" " "
6/II B-1614	5/II C-786	020, 021, 022, 023, 024	1975	October	" " "
7/II B-1600	6/II B-814	020, 021, 022, 023, 024	1976	January	NO <sub>x</sub> , NO, NO <sub>2</sub> , SO <sub>2</sub> , Wind Speed, Wind Direction, Relative Humidity, Temp- erature, Pyranometer, Hydrogen Sulfide, Total Hydrocarbons, Methane
7/II B-1603	7/II B-182	020, 021, 022, 023, 024	1976	Feb.	" " "
7/II B-1608	7/II B-897	023	1976	April	Wind Speed, Wind Direc- tion, Relative Humidity, Temperature



## CROSS-INDEX TO CORRECTIONS TO TABLE-IV OF MONTHLY RADIAN REPORTS

## DAILY AVERAGES

Quarterly Report Containing the Correction Page No.	Quarterly Report Containing Incorrect Data Page No.	Station No.	Year	Month	Constituent Identification
6/II B-1519	5/II C-114	020 & 023	1975	August	NMHC, CO
6/II B-1567	5/II C-447	020 & 023	1975	Sept.	" "
6/II B-1615	5/II C-794	020 & 023	1975	October	" "
7/II B-1601	6/II B-818	020, 021, 022, 023, 024	1976	January	NO <sub>2</sub> , SO <sub>2</sub>
7/II B-1602	6/II B-821	020, 022, 023, 024	1976	January	Pyranometer, Hydrogen Sulfide
7/II B-1604	7/II B-186	020, 021, 022, 023, 024	1976	Feb.	NO <sub>2</sub> , SO <sub>2</sub>
7/II B-1605	7/II B-189	020, 022, 023, 024	1976	Feb.	Pyranometer, Hydrogen Sulfide
7/II B-1609	7/II B-909	023	1976	April	Wind Direction -8', 30', 100', 200'
7/II B-1610	7/II B-911	023	1976	April	Temperature - 8', 30', 100', 200'



## CROSS-INDEX TO CORRECTIONS TO TABLE-V OF MONTHLY RADIAN REPORTS

## MAXIMUM 5-MINUTE AVERAGES AND TIME OF OCCURANCE

Quarterly Report Containing the Correction Page No.	Quarterly Report Containing Incorrect Data Page No.	Station No.	Year	Month	Constituent Identification
6/II B-1520	5/II C-133	020 & 023	1975	August	CO
6/II B-1568	5/II C-466	020 & 023	1975	Sept.	"
6/II B-1616	5/II C-813	020 & 023	1975	October	"
6/II B-1606	7/II B-201	020, 021, 022, 024	1976	Feb.	SO <sub>2</sub>
7/II B-1607	7/II B-206	020, 022, 023, 024	1976	Feb.	Hydrogen Sulfide
7/II B-1611	7/II B-929	023	1976	April	Wind Speed - Wind Direction - 8', 30', 100', 200'
7/II B-1612	7/II B-931	023	1976	April	Temperature - 8', 30', 100', 200'

## THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES

II-555

## NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

Quarterly Report Containing the Correction Page No.	Quarterly Report Containing Incorrect Data Page No.	Station No.	Year	Month	Constituent Identification
6/II B-1522	5/II C-169	020	1975	August	Carbon Monoxide
6/II B-1523	5/II C-170	023	1975	August	" "
6/II B-1570	5/II C-502	020	1975	Sept.	" "
6/II B-1571	5/II C-503	023	1975	Sept.	" "
6/II B-1618	5/II C-849	020	1975	October	" "
6/II B-1619	5/II C-850	023	1975	October	" "

CROSS-INDEX TO CORRECTIONS TO TABLE -VIII OF MONTHLY  
RADIAN REPORT

DIURNAL VARIATION OF GASES, PARTICULATES, AND METEOROLOGICAL DATA

Quarterly Report Containing the Correction Page No.	Quarterly Report Containing Incorrect Data Page No.	Station No.	Year	Month	Constituent Identification
6/II B-1524	5/II C-196	020	1975	August	Carbon Monoxide
6/II B-1525	5/II C-197	023	1975	August	" "
6/II B-1572	5/II C-529	020	1975	Sept.	" "
6/II B-1573	5/II C-530	023	1975	Sept.	" "
6/II B-1620	5/II C-876	020	1975	October	" "
6/II B-1621	5/II C-877	023	1975	October	" "
6/II B-1526	5/II C-273	020	1975	August	Graph of Carbon Monoxide
6/II B-1527	5/II C-274	023	1975	August	" " " "
6/II B-1574	5/II C-606	020	1975	Sept.	" " " "
6/II B-1575	5/II C-607	023	1975	Sept.	" " " "
6/II B-1622	5/II C-953	020	1975	October	" " " "
6/II B-1623	5/II C-954	023	1975	October	" " " "
7/II B-1613	7/II B-1012	023	1976	April	Wind Direction - 200'
7/II B-1614	7/II B-1037	023	1976	April	Temperature at 30'
7/II B-1615	7/II B-1039	023	1976	April	Temperature at 200'
7/II B-1617	7/II B-1115	023	1976	April	Graph of Temperature at 30'
7/II B-1618	7/II B-1117	023	1976	April	Graph of Temperature at 200'
7/II B-1616	7/II B-1101	023	1976	April	Graph of Wind Direction at 200'

(Continued)

## DIURNAL VARIATIONS OF GASES, PARTICULATES, AND METEOROLOGICAL DATA

Quarterly Report Containing the Correction Page No.	Quarterly Report Containing Incorrect Data Page No.	Station No.	Year	Month	Constituent Identification
8/II B-1570	3/II C-171	020	1975	Jan.	Non-methane Hydrocarbons
8/II B-1571	3/II C-172	023	1975	Jan.	" " "
8/II B-1574	3/II C-501	020	1975	Feb.	" " "
8/II B-1575	3/II C-502	023	1975	Feb.	" " "
8/II B-1578	3/II C-827	020	1975	Mar.	" " "
8/II B-1579	3/II C-828	023	1975	Mar.	" " "
8/II B-1582	3/II C-1152	020	1975	Apr.	" " "
8/II B-1583	3/II C-1153	023	1975	Apr.	" " "
8/II B-1586	4/II C-199	020	1975	May	" " "
8/II B-1587	4/II C-200	023	1975	May	" " "
8/II B-1590	4/II C-528	020	1975	June	" " "
8/II B-1591	4/II C-529	023	1975	June	" " "
8/II B-1594	4/II C-860	020	1975	July	" " "
8/II B-1595	4/II C-861	023	1975	July	" " "
8/II B-1598	5/II C-194	020	1975	Aug.	" " "
8/II B-1599	5/II C-195	023	1975	Aug.	" " "
8/II B-1602	5/II C-527	020	1975	Sept.	" " "
8/II B-1603	5/II C-528	023	1975	Sept.	" " "
8/II B-1606	5/II C-874	020	1975	Oct.	" " "
8/II B-1607	5/II C-875	023	1975	Oct.	" " "
8/II B-1610	6/II B-241	020	1975	Nov.	" " "
8/II B-1611	6/II B-242	023	1975	Nov.	" " "
8/II B-1614	6/II B-569	020	1975	Dec.	" " "
8/II B-1615	6/II B-570	023	1975	Dec.	" " "
8/II B-1618	6/II B-901	020	1976	Jan.	" " "
8/II B-1619	6/II B-902	023	1976	Jan.	" " "
8/II B-1622	7/II B-271	020	1976	Feb.	" " "
8/II B-1623	7/II B-272	023	1976	Feb.	" " "
8/II B-1626	7/II B-622	020	1976	Mar.	" " "
8/II B-1627	7/II B-623	023	1976	Mar.	" " "
8/II B-1572	3/II C-250	020	1975	Jan.	Graph of Non-methane Hydrocarbons
8/II B-1573	3/II C-251	023	1975	Jan.	" " " " "



(Continued)

## DIURNAL VARIATIONS OF GASES, PARTICULATES, AND METEOROLOGICAL DATA

Quarterly Report Containing the Correction Page No.	Quarterly Report Containing Incorrect Data Page No.	Station No.	Year	Month	Constituent Identification
8/II B-1576	3/II C-580	020	1975	Feb.	Graph of Non-methane Hydrocarbons
8/II B-1577	3/II C-581	023	1975	Feb.	" " " " "
8/II B-1580	3/II C-907	020	1975	Mar.	" " " " "
8/II B-1581	3/II C-908	023	1975	Mar.	" " " " "
8/II B-1584	3/II C-1229	020	1975	Apr.	" " " " "
8/II B-1585	3/II C-1230	023	1975	Apr.	" " " " "
8/II B-1588	4/II C-276	020	1975	May	" " " " "
8/II B-1589	4/II C-277	023	1975	May	" " " " "
8/II B-1592	4/II C-605	020	1975	June	" " " " "
8/II B-1593	4/II C-606	023	1975	June	" " " " "
8/II B-1596	4/II C-937	020	1975	July	" " " " "
8/II B-1597	4/II C-938	023	1975	July	" " " " "
8/II B-1600	5/II C-271	020	1975	Aug.	" " " " "
8/II B-1601	5/II C-272	023	1975	Aug.	" " " " "
8/II B-1604	5/II C-604	020	1975	Sept.	" " " " "
8/II B-1605	5/II C-605	023	1975	Sept.	" " " " "
8/II B-1608	5/II C-951	020	1975	Oct.	" " " " "
8/II B-1609	5/II C-952	023	1975	Oct.	" " " " "
8/II B-1612	6/II B-318	020	1975	Nov.	" " " " "
8/II B-1613	6/II B-319	023	1975	Nov.	" " " " "
8/II B-1616	6/II B-646	020	1975	Dec.	" " " " "
8/II B-1617	6/II B-647	023	1975	Dec.	" " " " "
8/II B-1620	6/II B-978	020	1976	Jan.	" " " " "
8/II B-1621	6/II B-979	023	1976	Jan.	" " " " "
8/II B-1624	7/II B-348	020	1976	Feb.	" " " " "
8/II B-1625	7/II B-349	023	1976	Feb.	" " " " "
8/II B-1628	7/II B-710	020	1976	Mar.	" " " " "
8/II B-1629	7/II B-711	023	1976	Mar.	" " " " "

CROSS INDEX TO CORRECTIONS TO MRI DIURNAL  
WIND DIRECTION DATA

Quarterly Report Containing the Correction / Page No.	Quarterly Report Containing the Incor- rect Data / Page No.	Sta. No.	Year	Month	Identification
9/ II B-63	4/ II C-35	031	1975	July	Wind Direction
64	-36	032			Wind Direction
65	-37	033			Wind Direction
66	5/ II C-34	031		Aug.	Wind Direction
67	-35	032			Wind Direction
68	-36	033			Wind Direction
69	6/ II B-33	031		Sept.	Wind Direction
70	-37	032			Wind Direction
71	-41	033			Wind Direction
72	-45	031		Oct.	Wind Direction
73	-49	032			Wind Direction
74	-53	033			Wind Direction
75	-57	031		Nov.	Wind Direction
76	-61	032			Wind Direction
77	-65	033			Wind Direction
78	-69	031	1975	Dec.	Wind Direction
79	-73	032			Wind Direction
80	-77	033			Wind Direction
81	-81	031	1976	Jan.	Wind Direction
82	-85	032			Wind Direction
83	-89	033			Wind Direction
84	7/ II B-34	031		Feb.	Wind Direction
		032			Wind Direction
85	-35	033			Wind Direction
86	-44	031		Mar.	Wind Direction
87	-45	032			Wind Direction
88	-46	033			Wind Direction
89	-56	031		Apr.	Wind Direction
90	-57	032			Wind Direction
91	-58	033			Wind Direction
92	8/ II B-67	041		May	Wind Direction
93	-68	042			Wind Direction
94	-69	043			Wind Direction
95	-70	041		June	Wind Direction
96	-71	042			Wind Direction
97	-72	043			Wind Direction
98	-73	041		July	Wind Direction
-	-	042			Wind Direction
99	-74	043	1976		Wind Direction

## CROSS INDEX TO CORRECTIONS, AEROVIRONMENT REPORTS

## DIURNAL VARIATION OF GASES, PARTICULATES, AND METEOROLOGICAL DATA

Semi Annual Report Con- taining Correction	* Page No.	Interim Monitoring Report Containing Incorrect Data	Page No.	Station No.	Year	Month	Constituent Identification
1/II B-1911		2/II B-171		023	77	Sept.	Total Hydrocarbons
1/II B-1912		2/II B-173		023	77	Sept.	Hydrocarbons less Methane
1/II B-1913		2/II B-172		023	77	Sept.	Methane
1/II B-1914		2/II B-174		023	77	Sept.	Carbon Monoxide
1/II B-1922		2/II B-277		023	77	Oct.	Total Hydrocarbons
1/II B-1923		2/II B-279		023	77	Oct.	Hydrocarbons less Methane
1/II B-1924		2/II B-278		023	77	Oct.	Methane
1/II B-1925		2/II B-280		023	77	Oct.	Carbon Monoxide
1/II B-1933		2/II B-379		023	77	Nov.	Delta T #2
1/II B-1947		2/II B-567		023	77	Dec.	Delta T #2
1/II B-1961		2/II B-779		023	77	Jan.	Barometric Pressure
1/II B-1962		2/II B-777		023	78	Jan.	Delta T #2
* Development Monitoring Report Number 1.							

## CROSS-INDEX TO CORRECTIONS TO TABLE - AEROVIRONMENT REPORTS

## DOWNTIME HOURS AND PERCENT EFFICIENCY REPORT

Semi Annual Report Con- taining Correction	Page No.	Interim Monitoring Report Containing Incorrect Data	Page No.	Station No.	Year	Month	Constituent Identification
1/II B-1916		2/II B-198		023	1977	Sept.	Part, RH1, SOLR, SO2, STH2, STH3, STH4, TEM2, TEM3, TEM4, THC, WD2, WD3, WD4, WS2, WS3, WS4
1/II B-1917		2/II B-197		023	1977	Sept.	BARP, BHD1, BHD3, BHP1, BSP3, BST1, BST3, BVD1, BVD3, BWS1, BWS3, CH4, CO, DT2, H2S, NO, NOX, O3
1/II B-1932		2/II B-304		023	1977	October	BARP, BHD1, BHD3, BHP1, BSP3, BST1, BST3, BVD1, BVD3, BWS1, BWS3, BWS3, CH4, CO, DT2, H2S, NO, NOX, O3
1/II B-1931		2/II B-305		023	1977	October	Part, RH1, SOLR, SO2, STH2, STH3, STH4, TEM2, TEM3, TEM4, THC, WD2, WD3, WD4, WS2, WS3, WS4



## CROSS-INDEX TO CORRECTIONS TO TABLE-AEROVIRONMENT REPORTS

## STABILITY CLASS REPORT

Semi Annual Report Con- taining Correction	Page No.	Interim Monitoring Report Containing Incorrect Data	Page No.	Station No.	Year	Month	Constituent Identification
1/II B-1934		2/II B-493		023	77	Nov.	Clock Hour
1/II B-1935		2/II B-494		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class A
1/II B-1936		2/II B-495		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class A
1/II B-1937		2/II B-496		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class B
1/II B-1938		2/II B-497		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class B
1/II B-1939		2/II B-498		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class C
1/II B-1940		2/II B-499		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class C
1/II B-1941		2/II B-500		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class D
1/II B-1942		2/II B-501		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class D
1/II B-1943		2/II B-502		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class E
1/II B-1944		2/II B-503		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class E



## CROSS-INDEX TO CORRECTIONS TO TABLE-AEROVIRONMENT REPORTS

## STABILITY CLASS REPORT

(CONTINUED)

Semi Annual Report Con- taining Corrections	Page No.	Interim Monitoring Report Containing Incorrect Data	Page No.	Station No.	Year	Month	Constituent Identification
1/II B-1945		2/II B-504		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class F
1/II B-1946		2/II B-505		023	77	Nov.	Hourly Wind Speed and Direction for Stability Class F
1/II B-1948		2/II B-703		023	77	Dec.	Clock Hour
1/II B-1949		2/II B-704		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class A
1/II B-1950		2/II B-705		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class A
1/II B-1951		2/II B-706		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class B
1/II B-1952		2/II B-707		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class B
1/II B-1953		2/II B-708		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class C
1/II B-1954		2/II B-709		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class C
1/II B-1955		2/II B-710		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class D
1/II B-1956		2/II B-711		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class D

## CROSS-INDEX TO CORRECTIONS TO TABLE-AEROVIRONMENT REPORTS

## STABILITY CLASS REPORT

(CONTINUED)

Semi Annual Report Con- taining Correction	Page No.	Interim Monitoring Report Containing Incorrect Data	Page No.	Station No.	Year	Month	Constituent Identification
1/II B-1957		2/II B-712		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class E
1/II B-1958		2/II B-713		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class E
1/II B-1959		2/II B-714		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class F
1/II B-1960		2/II B-715		023	77	Dec.	Hourly Wind Speed and Direction for Stability Class F
1/II B-1967		2/II B-923		023	78	Jan.	Clock Hour
1/II B-1968		2/II B-924		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class A
1/II B-1969		2/II B-925		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class A
1/II B-1970		2/II B-926		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class B
1/II B-1971		2/II B-927		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class B
1/II B-1972		2/II B-928		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class C
1/II B-1973		2/II B-929		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class C

## CROSS-INDEX TO CORRECTIONS TO TABLE-AEROVIRONMENT REPORTS

## STABILITY CLASS REPORT

(CONTINUED)

Semi Annual Report Con- taining Correction	Page No.	Interim Monitoring Report Containing Incorrect Data	Page No.	Station No.	Year	Month	Constituent Identification
1/II B-1974		2/II B-930		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class D
1/II B-1975		2/II B-931		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class D
1/II B-1976		2/II B-932		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class E
1/II B-1977		2/II B-933		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class E
1/II B-1978		2/II B-934		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class F
1/II B-1979		2/II B-935		023	78	Jan.	Hourly Wind Speed and Direction for Stability Class F

## CROSS-INDEX TO CORRECTIONS TO TABLE - AEROVIRONMENT REPORTS

## THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGE

Semi Annual Report Con- taining Correction	Page No.	Interim Monitoring Report Containing Incorrect Data	Page No.	Station No.	Year	Month	Constituent Identification
1/II B-1915		2/II B-212		023	1977	Sept.	Carbon Monoxide, Particulates, Hydro- carbons less Methane
1/II B-1926		2/II B-319		023	1977	October	Carbon Monoxide, Particulates, Hydro- carbons less Methane



## CROSS-INDEX TO CORRECTIONS TO TABLE - AEROVIRONMENT REPORTS

## DAILY AVERAGES SUMMARY REPORT

Semi Annual Report Con- ing Correction	Page No.	Interim Monitoring Report Containing Incorrect Data	Page No.	Station No.	Year	Month	Constituent Identification
1/II B-1918		2/II B-216		023	1977	Sept.	BST1, BST3, BSP1, BSP3, STH2, STH3, STH4
1/II B-1920		2/II B-215		023	1977	Sept.	WS2, WD2, WS3, WD3, WS4, WD4, BWS1, BHD1, BVD1, BWS3, BHD3, BVD1
1/II B-1921		2/II B-214		023	1977	Sept.	NOX, NO2, NO, SO2, H2S, O3, THC, HC, CH4, CO
1/II B-1919		2/II B-217		023	1977	Sept.	TEM2, TEM3, TEM4, RH1, BARP, SOLR, DT2
1/II B-1928		2/II B-321		023	1977	October	NOX, NO2, NO, SO2, H2S, O3, THC, HC, CH4, CO
1/II B-1927		2/II B-322		023	1977	October	WS2, WD2, WS3, WD3, WS4, WD4, BWS1, BHD1, BVD1, BWS3, BHD3, BVD3
1/II B-1930		2/II B-323		023	1977	October	BST1, BST3, BSP1, BSP3, STH2, STH3, STH4
1/II B-1929		2/II B-324		023	1977	October	TEM2, TEM3, TEM4, RH1, BARP, SOLR, DT2
1/II B-1966		2/II B-939		023	1978	Jan.	TEM2, TEM3, TEM4, RH1, BARP, SOLR, DT2
1/II B-1964		2/II B-940		023	1978	Jan.	BST1, BST3, BSP1, BSP3, STH2, STH3, STH4
1/II B-1963		2/II B-941		023	1978	Jan.	WS2, WD2, WS3, WD3, WS4, WD4, BWS1, BHD1, BVD1, BWS3, BHD3, BVD3
1/II B-1965		2/II B-942		023	1978	Jan.	NOX, NO2, NO, SO2, H2S, O3, THC, HC, CH4, CO



## CROSS INDEX TO CORRECTIONS, C-b DATA REPORTS

## DIURNAL VARIATION OF GASES, PARTICULATES, AND METEOROLOGICAL DATA

Semi Annual * Report Containing Correction	Page No.	Semi Annual Report Containing Incorrect Data	Page No.	Station No.	Year	Month	Constituent Identification
2/ II B-889		1/II B-1307		AB20	78	June	Inversion Height
2/ II B-890		1/II B-1468		AB23	78	July	Barometric Pressure
2/ II B-891		1/II B-1779		AB23	78	Sept.	Temperature @60m
2/ II B-892		1/II B-1784		AB23	78	Sept.	Solar Radiation
2/ II B-893		1/II B-1757		AB23	78	Sept.	Sulfur Dioxide
* Development Monitoring Report Number 2							

## CROSS INDEX TO CORRECTIONS, C-b DATA REPORTS

## Diurnal Variation of Gases, Particulates, and Meteorological Data

Semi Annual* Report Containing Page Correction No.	Semi Annual Report Containing Incorrect Data Page No.	Station No.	Year	Month	Constituent Identification
#3 / IIB-646	Interim Monitoring Report #2 / IIB-779	AB23	1978	Jan.	Barometric Pressure
-647	Development Monitoring Report #1 / IIB-468	AB23	1978	Feb.	Barometric Pressure
-648	" #1 / IIB-867	AB23	1978	Mar.	Barometric Pressure
-649	" #1 / IIB-899	AB23	1978	Apr.	Barometric Pressure
-650	" #1 / IIB-1107	AB23	1978	May	Barometric Pressure
-651	" #1 / IIB-1762	AB23	1978	Sep.	Carbon Monoxide
-652	" #2 / IIB-144	AB20	1978	Oct.	Carbon Monoxide
-653	" #2 / IIB-195	AB23	1978	Oct.	Carbon Monoxide
-654	" #2 / IIB-378	AB20	1978	Nov.	Carbon Monoxide
-655	" #2 / IIB-379	AB23	1978	Nov.	Carbon Monoxide
-656	" #2 / IIB-496	AB20	1978	Dec.	Carbon Monoxide
-657	" #2 / IIB-497	AB23	1978	Dec.	Carbon Monoxide
-658	" #2 / IIB-578	AB20	1979	Jan.	Carbon Monoxide
-659	" #2 / IIB-579	AB23	1979	Jan.	Carbon Monoxide
-660	" #2 / IIB-656	AB20	1979	Feb.	Carbon Monoxide
-661	" #2 / IIB-657	AB23	1979	Feb.	Carbon Monoxide
-662	" #2 / IIB-738	AB20	1979	Mar.	Carbon Monoxide
-663	" #2 / IIB-867	AB20	1979	Apr.	Carbon Monoxide
-673	" #2 / IIB-742	AB20	1979	Mar.	Particulates
-673	" #2 / IIB-742	AB23	1979	Mar.	Particulates
-673	" #2 / IIB-742	AD56	1979	Mar.	Particulates
-674	" #2 / IIB-824	AB20	1979	Apr.	Particulates
-674	" #2 / IIB-824	AB23	1979	Apr.	Particulates
-674	" #2 / IIB-824	AD56	1979	Apr.	Particulates
-664	" #2 / IIB-1287	AB20	1978	Jun.	Particulates
-664	" #2 / IIB-1287	AB23	1978	Jun.	Particulates
-664	" #2 / IIB-1287	AD42	1978	Jun.	Particulates
-664	" #2 / IIB-1287	AD56	1978	Jun.	Particulates
-665	" #2 / IIB-1449	AB20	1978	Jul.	Particulates
-665	" #2 / IIB-1449	AB23	1978	Jul.	Particulates
-665	" #2 / IIB-1449	AD42	1978	Jul.	Particulates
-665	" #2 / IIB-1449	AD56	1978	Jul.	Particulates

\* Development Monitoring Report Number 3

## CROSS INDEX TO CORRECTIONS, C-b DATA REPORTS

## Diurnal Variation of Gases, Particulates, and Meteorological Data

(Continued)

Semi Annual* Report Containing Correction	Page No.	Semi Annual Report Containing Incorrect Data	Page No.	Station No.	Year	Month	Constituent Identification
#3 / IIB-		Development Monitoring Report	#2 / IIB-1605	AB20	1978	Aug.	Particulates
-666		"	#2 / IIB-1605	AB23	1978	Aug.	Particulates
-666		"	#2 / IIB-1605	AD42	1978	Aug.	Particulates
-666		"	#2 / IIB-1605	AD56	1978	Aug.	Particulates
-667		"	#2 / IIB-1763	AB20	1978	Sep.	Particulates
-667		"	#2 / IIB-1763	AB23	1978	Sep.	Particulates
-667		"	#2 / IIB-1763	AD42	1978	Sep.	Particulates
-667		"	#2 / IIB-1763	AD56	1978	Sep.	Particulates
-668		"	#2 / IIB-198	AB20	1978	Oct.	Particulates
-668		"	#2 / IIB-198	AB23	1978	Oct.	Particulates
-668		"	#2 / IIB-198	AD42	1978	Oct.	Particulates
-668		"	#2 / IIB-198	AD56	1978	Oct.	Particulates
-669		"	#2 / IIB-382	AB20	1978	Nov.	Particulates
-669		"	#2 / IIB-382	AB23	1978	Nov.	Particulates
-669		"	#2 / IIB-382	AD42	1978	Nov.	Particulates
-669		"	#2 / IIB-382	AD56	1978	Nov.	Particulates
-670		"	#2 / IIB-500	AB20	1978	Dec.	Particulates
-670		"	#2 / IIB-500	AB23	1978	Dec.	Particulates
-670		"	#2 / IIB-500	AD42	1978	Dec.	Particulates
-670		"	#2 / IIB-500	AD56	1978	Dec.	Particulates
-671		"	#2 / IIB-582	AB20	1979	Jan.	Particulates
-671		"	#2 / IIB-582	AB23	1979	Jan.	Particulates
-671		"	#2 / IIB-582	AD42	1979	Jan.	Particulates
-671		"	#2 / IIB-582	AD42	1979	Jan.	Particulates
-672		"	#2 / IIB-660	AB20	1979	Feb.	Particulates
-672		"	#2 / IIB-660	AB23	1979	Feb.	Particulates
-672		"	#2 / IIB-660	AD56	1979	Feb.	Particulates

\*Development Monitoring Report Number 3



## CROSS INDEX TO CORRECTIONS, C-b DATA REPORTS

## The Five Maximum Independent Sliding Averages

Semi Annual* Report Containing Page Correction No.	Semi Annual Report Containing Incorrect Data Page No.	Station No.	Year	Month	Constituent Identification
#3 / IIB-	Development Monitoring Report #2 / IIB-1906	AB23	1978	Sep.	CO
-620	" #2 / IIB-1907	AB23	1978	Sep.	SO <sub>2</sub> , O <sub>3</sub>
-620	" #2 / Missing	AB20	1978	Oct.	CO, O <sub>3</sub>
-621	" #2 / IIB-353	AB23	1978	Oct.	CO
-622	" #2 / IIB-354	AB23	1978	Oct.	SO <sub>2</sub> , O <sub>3</sub>
-622	" #2 / IIB-471	AB20	1978	Nov.	CO, O <sub>3</sub>
-623	" #2 / IIB-472	AB23	1978	Nov.	CO
-624	" #2 / IIB-473	AB23	1978	Nov.	SO <sub>2</sub> , O <sub>3</sub>
-624	" #2 / IIB-553	AB20	1978	Dec.	CO, O <sub>3</sub>
-625	" #2 / IIB-554	AB23	1978	Dec.	CO
-626	" #2 / IIB-555	AB23	1978	Dec.	SO <sub>2</sub> , O <sub>3</sub>
-626	" #2 / IIB-631	AB20	1979	Jan.	CO, O <sub>3</sub>
-627	" #2 / IIB-632	AB23	1979	Jan.	SO <sub>2</sub> , O <sub>3</sub>
-628	" #2 / IIB-633	AB23	1979	Jan.	CO
-628	" #2 / IIB-713	AB20	1979	Feb.	CO, O <sub>3</sub>
-629	" #2 / IIB-714	AB23	1979	Feb.	CO
-630	" #2 / IIB-715	AB23	1979	Feb.	SO <sub>2</sub> , O <sub>3</sub>
-630	" #2 / IIB-795	AB20	1979	Mar.	CO, O <sub>3</sub>
-631	" #2 / IIB-877	AB20	1979	Apr.	CO, O <sub>3</sub>
-632					

\*Development Monitoring Report Number 3

## CROSS INDEX TO CORRECTIONS, C-b DATA REPORTS

Number of One Hour Samples by Concentration and Wind Direction

Semi Annual* Report Containing Correction	Page No.	Semi Annual Report Containing Incorrect Data		Station No.	Year	Month	Constituent Identification
			Page No.				
#3 / IIB-		Development Monitoring					
-633		Report #2 / IIB-miss-		AB23	1978	Sep.	Carbon Monoxide
		ing					
-634		" #2 / IIB-343		AB20	1978	Oct.	Carbon Monoxide
-635		" #2 / IIB-344		AB23	1978	Oct.	Carbon Monoxide
-636		" #2 / IIB-462		AB20	1978	Nov.	Carbon Monoxide
-637		" #2 / IIB-463		AB23	1978	Nov.	Carbon Monoxide
-638		" #2 / IIB-543		AB20	1978	Dec.	Carbon Monoxide
-639		" #2 / IIB-544		AB23	1978	Dec.	Carbon Monoxide
-640		" #2 / IIB-622		AB20	1979	Jan.	Carbon Monoxide
-641		" #2 / IIB-623		AB23	1979	Jan.	Carbon Monoxide
-642		" #2 / IIB-703		AB20	1979	Feb.	Carbon Monoxide
-643		" #2 / IIB-704		AB23	1979	Feb.	Carbon Monoxide
-644		" #2 / IIB-785		AB20	1979	Mar.	Carbon Monoxide
-645		" #2 / IIB-786		AB20	1979	Apr.	Carbon Monoxide

\*Development Monitoring Report Number 3



## CROSS INDEX TO CORRECTIONS, C-D DATA REPORTS

Semi Annual Report Containing Correction	Page No.	Semi Annual Report Containing Incorrect Data		Station No.	Year	Month	Constituent Identification
			Page No.				
#4/II	-717	Development Monitoring		AB23	1979	May	Evaporation
	-718	Report #3 / IIB-165		AB23	1979	June	Evaporation
	-719	" #3 / IIB-249		AB23	1979	July	Evaporation
	-720	" #3 / IIB-333		AB23	1979	Aug.	Evaporation
	-721	" #3 / IIB-417		AB23	1979	Sept	Evaporation
	-722	" #3 / IIB-501		AB23	1979	Oct.	Evaporation
	-723	" #3 / IIB-585		AB23	1979	Oct.	Evaporation
		" #2 / IIC-8		--	78-79	--	Deer Road Kill





### 2.3.11 SUPPLEMENTAL DATA REPORT

This section contains supplemental data not included in the monthly data reports.

#### QUARTERLY FREQUENCY TABLE OF WIND SPEED BY DIRECTION

			<u>Page</u>
Station AB20 (12/01/80 to 02/28/81)			II-576
Station AA23 (12/01/80 to 02/28/81)	10 Meter		II-577
Station AA23 (12/01/80 to 02/28/81)	30 Meter		II-578
Station AA23 (12/01/80 to 02/28/81)	60 Meter		II-579

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

C-B SHALE OIL PROJECT

STATION AB20 PERIOD(12/01/80 TO 2/28/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																VAR	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8. - 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. - 8. :	1	0	0	0	0	5	8	0	3	0	0	0	4	5	0	0	0	26
3. - 5. :	1	0	0	6	3	14	167	14	28	10	8	3	45	22	7	1	0	329
1. - 3. :	7	3	4	9	101	400	256	31	50	25	30	3	62	92	22	12	2	1109
LT 1. :	3	11	14	14	111	182	64	8	12	10	7	6	19	40	30	12	2	545
TOTAL :	12	14	18	29	215	601	495	53	93	45	45	12	130	159	59	25	4	2009
PERCENT	1.	1.	1.	1.	11.	30.	25.	3.	5.	2.	2.	1.	6.	8.	3.	1.	0.	100.

0 = NO OBSERVATIONS



# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

10 METER LEVEL

C-B SHALE OIL PROJECT

STATION AA23 PERIOD(12/01/80 TO 2/28/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	VAR	TOTAL
GT 11. :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 :	0
8. - 11. :	0	0	0	0	0	0	0	1	10	11	0	0	0	0	0	0	0 :	22
5. - 8. :	0	0	0	0	0	0	0	4	38	41	41	3	4	3	1	1	0 :	136
3. - 5. :	2	0	0	1	1	2	4	11	45	102	96	6	7	10	21	16	0 :	324
1. - 3. :	23	7	3	4	26	86	82	60	70	82	132	55	40	64	61	46	1 :	842
LT 1. :	33	20	16	24	35	49	57	65	64	68	134	55	44	18	48	32	6 :	768
TOTAL :	58	27	19	29	62	137	143	141	227	304	403	119	95	95	131	95	7	2092
PERCENT	3.	1.	1.	1.	3.	7.	7.	7.	11.	15.	19.	6.	5.	5.	6.	5.	0.	100.

0 = NO OBSERVATIONS

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

30 METER LEVEL

STATION AA23 PERIOD(12/01/80 TO 2/28/81)

## WIND DIRECTION

WIND SPEED															NNW		NW		WNW		W		WSW		SW		SSW		S		SSE		SE		ESE		E		ENE		NE		NNE		N		VAR		TOTAL	
MAX																																																		
METERS/SEC																																																		
GT 11. :		0	0	0	0	0	2	0	1	9	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25											
8. - 11. :		0	0	0	0	0	40	19	5	15	19	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106											
5. - 8. :		1	0	0	1	4	72	47	4	21	44	10	0	1	4	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	223												
3. - 5. :		4	0	1	2	13	104	48	12	25	50	21	6	14	26	35	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	381												
1. - 3. :		22	12	10	16	71	158	100	47	39	39	17	48	56	59	56	51	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	802												
LT 1. :		28	17	32	29	53	70	60	30	27	23	42	22	23	17	37	27	5	5	42	22	23	17	37	27	27	27	27	27	27	27	27	27	27	27	27	27	542												
TOTAL :		55	29	43	48	141	446	274	99	136	188	97	76	94	106	135	106	6	2079	76	94	106	135	106	135	106	106	106	106	106	106	106	106	106	106	106	106	106	2079											
PERCENT		3.	1.	2.	2.	7.	21.	13.	5.	7.	9.	5.	4.	5.	5.	6.	5.	0.	100	4.	5.	5.	6.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	5.	100												

PERCENT 3. 1. 2. 2. 7. 21. 13. 5. 7. 9. 5. 4. 5. 5. 6. 5. 0. 100.

0 = NO OBSERVATIONS

# FREQUENCY TABLE OF WIND SPEED BY DIRECTION

60 METER LEVEL

C-B SHALE OIL PROJECT

STATION AA23 PERIOD(12/01/80 TO 2/28/81)

WIND SPEED MAX METERS/SEC	WIND DIRECTION																VAR	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
GT 11. :	0	0	2	6	0	0	0	1	0	11	3	0	0	0	0	0	0 :	23
8. - 11. :	0	0	5	22	21	4	3	1	5	25	21	1	0	0	0	0	0 :	108
5. - 8. :	3	7	16	50	58	12	1	3	9	37	37	1	0	2	5	3	0 :	244
3. - 5. :	7	17	21	52	65	18	13	31	31	53	77	14	6	7	30	14	4 :	460
1. - 3. :	36	32	43	54	52	47	59	79	74	83	56	30	48	65	54	52	43 :	907
LT 1. :	28	18	17	16	14	24	25	29	21	18	9	20	20	23	15	22	34 :	353
TOTAL :	74	74	104	200	210	105	101	144	140	227	203	66	74	97	104	91	81	2095
PERCENT	4.	4.	5.	10.	10.	5.	5.	7.	7.	11.	10.	3.	4.	5.	5.	4.	4.	100.

0 = NO OBSERVATIONS









## 2.4 Noise

The environmental noise program conducted since baseline is not required under the lease but was requested by the Deputy Conservation Manager. General background noise levels were sought on the Tract and surrounding vicinity prior to Tract development. Monitoring of those levels was reinitiated in February, 1978 at the three sites shown in Figure 2.4-1 to determine the effects of Tract development on noise levels and has continued through the development period.



# NOISE DEVELOPMENT MONITORING NETWORK

- = Traffic Noise Station - Shift Change - 1 day/wk.
- = Tract Noise Surveillance - Continuous - every 6th day

Figure 2.4-1









#### 2.4.1 Environmental Noise

Environmental noise will be covered in this section. Occupational noise exposure is covered in Section 2.7 Industrial Health and Safety. Monitoring of background noise levels of Traffic and Tract Noise, are shown in Figure 2.4-1.

These station locations are referenced by four-digit computer station codes. A cross-reference of the computer code and station I.D. appear in Section 4.2.

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#### 2.4.1.1 Tract Noise

This section presents data for noise monitoring during development. Continuous noise measurements are made at Station NB15 on the northern boundary of the Tract for 24 hours every sixth day with a sensor recording system. The following tables present the data collected at Station NB15 for December, 1980 through January 1981. This station was discontinued in January 1981. It has been replaced by two fixed site, 24-hour monitoring stations, located at the V/E Shaft (NA22) and the guard shack (NA01). Data monitored from February through May 1981 are presented in this section.



## NOISE DATA

24 HOUR, FIXED SITE MONITORING

STATION II

GUARD SHACK (NA01)

1. START TIME (MST) 2. STOP TIME (MST) 3. CHART RANGE 4. WIND SPEED 5. WIND DIRECTION	PEAK db 1900 to 0700	PEAK db 0700 to 1900	AVERAGE db 1900 to 0700	AVERAGE 0700 to 1900	BACKGROUND TAKEN FROM 1900-0700
1. 1200 5/7/81 2. 1230 5/8/81 3. 60db 4. 5-10 mph 5. westerly	77	78	52	55	52
1. 1000 5/13/81 2. 1030 5/14/81 3. 60db 4. -0- 5. no wind	70	76	55	55	53
1. 1015 5/19/81 2. 0900 5/20/81 3. 60db 4. 5-8 mph 5. south	68	80	55	55	54
1. 1300 5/27/81 2. 1300 5/28/81 3. 60db 4. -0- 5. N/A	65	80	55	55	55

NOISE DATA

24 HOUR, FIXED SITE MONITORING

STATION II

GUARD SHACK (NA01)

1. START TIME 2. STOP TIME 3. CHART RANGE 4. WIND SPEED 5. WIND DIRECTION	PEAK db  1900 to 0700	PEAK db  0700 to 1900	AVERAGE db  1900 to 0700	AVERAGE db  0700 to 1900	BACKGROUND TAKEN FROM 1900-0700
1. INVALID - NO NOISE STUDY DUE TO HIGH WINDS - 4/1/81					
1. 1410 4/8/81 2. 1430 4/9/81 3. 60 db 4. 2-3 5. westerly	68	78	55	58	52
1. 1000 4/14/81 2. 1000 4/15/81 3. 60 db 4. 0-2 mph 5. westerly	74	78	52	53	52
1. 1110 4/22/81 2. 1200 4/23/81 3. 60 db 4. 2 mph 5. northerly	76	78	52	53	52
1. 0840 4/29/81 2. 0900 4/30/81 3. 60 db 4. -0- 5. no wind	65	78	52	53	52

NOISE DATA  
24 HOUR, FIXED SITE MONITORING  
STATION II  
Guard Shack (NA01)

1. START TIME (MST) 2. STOP TIME (MST) 3. CHART RANGE 4. WIND SPEED 5. WIND DIRECTION	PEAK db 1900 to 0700	PEAK db 0700 to 1900	AVERAGE db 1900 to 0700	AVERAGE db 0700 to 1900	<u>BACKGROUND</u> TAKEN FROM 1900-0700
1. 1400 3/4/81 2. 1500 3. 60 db 4. 2-3 mph 5. NW	76	78	55	54	52
1. 1330 3/11/81 2. 1400 3/12/81 3. 60 db 4. 5-8 mph 5. North	70	80	57	58	54
1. 1345 3/18/81 2. 1330 3/19/81 3. 60 db 4. 3/19 up to 20 mph 5. South	78	80	56	55	52
1. 1000 3/25/81 2. 1045 3/26/81 3. 60 db 4. 3-5 also gusty 5. South	80	68	49	55	50

# NOISE DATA

24 HOUR, FIXED SITE MONITORING

STATION I

V/E SHAFT (NA22)

1. START TIME 2. STOP TIME 3. CHART RANGE 4. WIND SPEED 5. WIND DIRECTION	PEAK db  1900 to 0700	PEAK db  0700 to 1900	AVERAGE db  1900 to 0700	AVERAGE db  0700 to 1900	BACKGROUND  TAKEN FROM 1900-0700
1. 1130 5/7/81 2. 1200 5/8/81 3. 60 db 4. 5-10 mph gusts 5. westerly	64	70	55	56	55
1. 0930 5/13/81 2. 1000 5/14/81 3. 60db 4. -0- 5. no wind	68	72	57	57	56
1. 0730 5/19/81 2. 1400 5/20/81 3. 60db 4. 5-8 5. south	74	75	58	58	55
1. 1230 5/27/81 2. 1245 5/28/81 3. 60db 4. -0- 5. N/A	69	75	58	58	55

## NOISE DATA

## 24 HOUR, FIXED SITE MONITORING

STATION I

V/E SHAFT (NA22)

1. START TIME 2. STOP TIME 3. CHART RANGE 4. WIND SPEED 5. WIND DIRECTION	PEAK db 1900 to 0700	PEAK db 0700 to 1900	AVERAGE db 1900 to 0700	AVERAGE db 0700 to 1900	BACKGROUND TAKEN FROM 1900-0700
NO STUDY - 4/1/81 - WINDY THROUGH THE WEEK - OVER 10-15 MPH					
1. 1400 4/8/81 2. 1430 4/9/81 3. 60 db 4. 2-3 mph 5. westerly	67	75	55	55	54
1. 0830 4/14/81 2. 0830 4/15/81 3. 60 db 4. no wind 5. -0-	62	68	55	55	55
1. 4-22-81 2. 4-23-81	INSTRUMENT MALFUNCTION - REPAIRED, BUT NO RUN THIS WEEK				
1. 0800 4/29/81 2. 0815 4/30/81 3. 60 db 4. no wind 5. -0-	74	75	68	58	55



NOISE DATA  
24 HOUR, FIXED SITE MONITORING  
STATION I  
V/E Shaft (NA22)

1. START TIME (MST) 2. STOP TIME (MST) 3. CHART RANGE 4. WIND SPEED 5. WIND DIRECTION	PEAK db 1900 to 0700	PEAK db 0700 to 1900	AVERAGE db 1900 to 0700	AVERAGE db 0700 to 1900	BACKGROUND TAKEN FROM 1900-0700
1. 1330 3/4/81 2. 1400 3/5/81 3. 60 db 4. 1-3 mph 5. North-Northwest	70	64	58	58	58
1. 1300 3/11/81 2. 1330 3. 60 db 4. 2-3 mph 5. Northwest	68	60	58	59	56
1. 1330 3/18/81 2. 1330 3/19/81 3. 60 db 4. 3-5 mph gusts 5. South	65	66	58	59	55
1. 1330 3/25/81 2. 1340 3/26/81 3. 60 db 4. 3-5 average gusts 20 mph 5. South	64	68	57	58	54

## NOISE DATA

## 24 HOUR, FIXED SITE MONITORING

STATION 1

V/E Shaft (NA22)

1. START TIME (MST) 2. STOP TIME (MST) 3. CHART RANGE 4. WIND SPEED 5. WIND DIRECTION	PEAK db 1900 to 0700	PEAK db 0700 to 1900	AVERAGE db 1900 to 0700	AVERAGE db 0700 to 1900	BACKGROUND TAKEN FROM 1900-0700
1. 1030 2/4/81 2. 1045 2/5/81 3. 60 db 4. No Wind 5. N/A	63	64	56	58	55
1. 1300 2/11/81 2. 1300 2/12/81 3. 60 db 4. No Wind 5. -0-	68	72	58	63	54
1. 1400 2/17/81 2. 1330 2/18/81 3. 60 db 4. 2-5 mph 5. South	67	65	58	58	56
1. 1300 2/25/81 2. 1330 2/26/81 3. 60 db 4. No Wind 5. -0-	67	68	58	56	58

NOISE DATA  
 SITE XV  
 24 HOUR, FIXED SITE MONITORING  
 METER TYPE B & K TYPE 2203  
 METER ID#672110  
 RECORDER TYPE B & K TYPE 2306  
 RECORDER ID#694343

1. START TIME (MST) 2. STOP TIME 3. CHART RANGE 4. WIND SPEED 5. WIND DIRECTION	PEAK db	PEAK db	AVERAGE db	AVERAGE db	BACKGROUND
	1900 to 0700	0700 to 1900	1900 to 0700	0700 to 1900	TAKEN FROM 1900-0700
1. 12-03-80 1300 2. 12-04-80 1400 3. 40-80 db 4. 10-15 S-SW 5. Southerly	68	74	60	68	60
1. 12-10-80 1330 2. 12-11-80 1400 3. 40-80 db 4. No Wind 5. -0-	68	65	58	58	Less 50
1. 12-17-80 1300 2. 12-18-80 1330 3. 40-80 db 4. 2-5 mph 5. S-SW	71	70	56	58	55
1. 12-23-80 1000 2. 12-24-80 1400 3. 40-80 db 4. No Wind 5. -0-	70	74	58	58	55
1. 12-30-80 1100 2. 12-31-80 1100 3. 40-80 db 4. No Wind 5. -0-	60	62	55	55	Less Than 50

NOISE DATA  
 SITE XV  
 24 HOUR, FIXED SITE MONITORING  
 METER TYPE B & K TYPE 2203  
 METER ID#672110  
 RECORDER TYPE B & K TYPE 2306  
 RECORDER ID#694343

1. START TIME (MST) 2. STOP TIME 3. CHART RANGE 4. WIND SPEED 5. WIND DIRECTION	PEAK db 1900 to 0700	PEAK db 0700 to 1900	AVERAGE db 1900 to 0700	AVERAGE db 0700 to 1900	BACKGROUND TAKEN FROM 1900-0700
1. 1-07-81 1500 1-08-81 1400 .. 40-80 db 4. No Wind 5. -0-	54	60	52	60	Less 50
1. 1-14-81 1245 2. 1-15-81 1300 ~ 40-80 db 2-5 S 5. S-SW	71	72	58	55	58
1. 1-21-81 1300 2. 1-22-81 1330 3. 40-80 db No Wind -0-	65	71	59	57	55
1. 1-29-81 0945 2. 1-30-81 1045 3. 40-80 db 4. -0 Wind to 20 mph 1/30 5. Southerly	70	75*	58	60	58

\* About 0800 1/30/81 Due To Winds







#### 2.4.1.2 Traffic Noise

Traffic noise measurements are made one day per week approximately at morning shift change at Stations NAO2 and NAO9 along Piceance Creek Road and on the access road at the Tract boundary, respectively. The general radio 1565 sound level meter (SLM) is used to measure peak noise levels at A weighting. Background levels (i.e., no traffic) are obtained the same day at A, B, C weightings. Monitoring of these stations was discontinued in December 1980 for traffic noise. An affixed noise monitoring station (NAO1) has been initiated at this same location (the guard shack). These data will monitor noise for a 24-hour period every 6th day. Data included in this section are December 1980. Data from NAO1 will be presented in the Tract Noise section.

TRACT C-b NOISE STUDY DATA SHEET

DATE: 12/4/80

TEMPERATURE: 40  
WIND SPEED: 10 N (MPH)

METER TYPE: General Radio 1561-B  
METER ID#: 28612  
MICROPHONE SERIAL NO: 44682

SITE	TIME (MST)	WEIGHTING (A,B,C) + READING (dB)	METER RESPONSE  S = SLOW F = FAST	COMMENTS		VEHICLE INFORMATION
				POSITION OF OBSERVER	POSITION OF MICROPHONE WITH RESPECT TO NOISE	
STATION IX BACKGROUND	1300	A. 40 B. 44 C. 50	S S S	By Guard Shack	90°	
TRAFFIC	1315	68 75 67 65 80 67 70 72				Pickup S Dump Truck S Car N Car S Dump Truck N Pickup N Van N Pickup S
STATION II BACKGROUND	1330	A. 40 B. 42 C. 46		By Highway at Entrance	90°	
TRAFFIC		85 83 72 75 68 74 80 69				Semi Truck E Semi Truck E Pickup W Pickup W Car E Pickup E Dump Truck W Toyota Pickup E



TRACT C-b NOISE STUDY DATA SHEET

DATE: 12-10-80

TEMPERATURE: 42° F  
WIND SPEED: -0- (MPH)

METER TYPE: General Radio 1561-B  
METER ID#: 28612  
MICROPHONE SERIAL NO: 44682

SITE	TIME (MST)	WEIGHTING (A,B,C) + READING (dB)	METER RESPONSE  S = SLOW F = FAST	COMMENTS		VEHICLE INFORMATION
				POSITION OF OBSERVER	POSITION OF MICROPHONE WITH RESPECT TO NOISE	
Station IX						
BACKGROUND	1330	A 40 B 40 C 50	S S S	By Guard Shack		
TRAFFIC	1355	65 78 68 72 79 68 65 68				Dump Trk S Truck S Car N Tractor S Dump Trk N Car S Car S PickUp N
STATION II	1400	A 40 B 40 C 42	S S S	30' S of Highway		
TRAFFIC		82 85 72 75 69 71 69 73				SemiTrk E SemiTrk E PickUp W Pickup E Car W Van E StaWgn E PickUp E

TRACT C-b NOISE STUDY DATA SHEET

DATE: 12-17-80

TEMPERATURE: 48°F  
WIND SPEED: 2-5 S (MPH)

METER TYPE: General Radio 1561-B  
METER ID#: 28612  
MICROPHONE SERIAL NO: 44682

SITE	TIME (MST)	WEIGHTING (A,B,C) + READING (dB)	METER RESPONSE  S = SLOW F = FAST	COMMENTS		VEHICLE INFORMATION
				POSITION OF OBSERVER	POSITION OF MICROPHONE WITH RESPECT TO NOISE	
STATION IX BACKGROUND	1300	A. 40 B. 44 C. 48	S S S	By Guard	Shack  90°	
TRAFFIC	1310       1315	65 68 78 72 62 65 80 79				Chevy Truck S Pickup S Truck N Van S Toyota Car S Pickup N Water Truck S Cement Truck N
STATION II BACKGROUND	1320	A. 40 B. 40 C. 43		South of	Highway 90°	
TRAFFIC	1327    1340  1350	84 70 69 74 80 68 75 81				Semi Truck E Pickup E Chevy Car W Dodge Pickup E Semi E Pickup W Van W Semi E